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Conceptual Metaphor Theory and Pictorial Representations of Emotions

Anger, Fear and Pride in the comic serial *The Life and Times of Scrooge McDuck*

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Tiivistelmä - Referat - Abstract

Tutkimukseni aiheena on George Lakoffin ja Mark Johnsonin kognitiivisen metaforateorian hyödyllisyyden arviointi, etenkin yhteydessä konventionaalisen kielenkäyttöön. Teorian mukaan abstraktit asiat ymmärretään konkreettisten asioiden kautta, ja kielenkäyttö sekä ajattelu perustuvat pitkälti näihin konseptuaalisiin metaforiin. Tästä johtuen lukuisat kielitieteelliset tutkimukset ovat tarkastelleet mitä erilaisimpia tekstejä, ja asetelleet niistä löytyvät ilmaisut konseptuaalisten metaforien alle.

Kognitiivinen metaforateoria on saanut osakseen myös huomattavaa kritiikkiä. Tämä kritiikki perustuu pääasiassa siihen, että todisteena konseptuaalisille metaforille toimivat samat ilmaisut, jotka näiden metaforien pitäisi selittää. Metaforatutkijat ovatkin ehdottaneet, että yksi keino tämän kehäpäättelyn purkamiseen on tarkastella metaforien esiintymistä sanallisen viestinnän ulkopuolella. Koska aikaisemmat tutkimukset ovat hyvin tarkasti kartoittaneet tunteiden konseptit, päätin tarkastella vihan, pelon ja ylpeyden kuvallista esittämistä sarjakuvissa saadakseni selville, miten visuaalisen materiaalin tutkiminen pystyy vastaamaan teoriaa kohtaan esitettyihin kritiikkeihin.

Tutkimusmateriaalina on Don Rosan kirjoittama ja piirtämä sarjakuva-albumi *Roope Ankan elämä ja teot*. Kokoan kaikki albumissa esiintyvät hahmot, jotka kuvaavat yhtä valituista tunteista sekä kaikki visuaaliset merkit, jotka osallistuvat näiden tunteiden esittämiseen. Tämän jälkeen arvioin, miten kognitiivisen metaforateorian voi sanoa selittävän nämä esiintymät, ja miten osuvaa kritiikki on visuaalisten metaforien suhteen.

Tutkimuksen perusteella saavun johtopäätökseen, että konseptuaalisia metaforia koskeva kritiikki on ollut perusteltua, ja näiden metaforien taustalla olevan teorian puutteista johtuen ei niillä voi sanoa olevan merkittävää selittävää hyötyä konventionaalisen kielenkäytön suhteen. Myös visuaalisten metaforien suhteen sama kehäpäättely on edelleen voimissaan. Monilla näistä konseptuaalisista metaforista on kyllä deskriptiivistä arvoa, ja metaforilla voi olla huomattavaa etymologista merkitystä, mutta usein konseptuaaliset metaforat yksinkertaisesti kuvaavat mitä sanotaan tai esitetään, eivätkä selitä miksi näin on. Toinen merkittävä johtopäätös on, että kielitieteellinen tutkimus ei ole riittävää kognitiivisen metaforateorian suhteen, vaan tarvitaan poikkitieteellistä tutkimusta, etenkin kognitiotieteiden kanssa.

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kognitiivinen metaforateoria, metafora, Don Rosa, Roope Ankka, sarjakuva

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Muita tietoja - Övriga uppgifter - Additional information

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1. Introduction

Metaphors are all around us. Aristotle (1965) wrote of them as a sign of an artist's mastery over language, but it is clear that metaphors are not the result of poetic inspiration alone: in everyday contexts we speak of arguments in terms of war, love in terms of journeys, and time in terms of space, just to name a few notable examples. When one is inclined to be on the lookout for metaphors in our speech and writing, they can stick out like a sore thumb.

But while the ubiquitous nature of metaphor in language is a matter of little dispute, the significance of those metaphors is subject to heated debate. To explain the prevalence of such expressions, the linguist George Lakoff and philosopher Mark Johnson introduced the idea of "the embodied mind," which means that thinking is based on bodily experience and the human conceptual system is metaphorically structured, with abstract concepts understood through concrete ones. Their Conceptual Metaphor Theory is by no means accepted by all, and it has faced some harsh criticism (McGlone 2007; Murphy 1996, 1997; Pinker 2007), with some, particularly within Relevance-Theoretic framework, viewing metaphorical understanding as a strictly inferential process (Vega Moreno 2004, Wilson and Carston 2008). Indeed, Raymond Gibbs (2014, 17) has noted that in some circles the Conceptual Metaphor Theory is "ridiculed, dismissed or ignored."

One common criticism levelled against the cognitive theory of metaphor has been the circularity of evidence, as most of the evidence for the idea is the linguistic data that the theory itself is supposed to explain. Scholars like Charles Forceville (2005) have suggested that one possible way to break this circularity is to look at other means of communication, such as pictorial and multimodal communication, arguing that if metaphors are a matter of cognition rather than language, then they should not be limited to verbal discourse.

Using the comic serial *The Life and Times of Scrooge McDuck* by Don Rosa as research material, I attempt to evaluate the explanatory value of conceptual metaphors. As Zoltán Kövecses (1986, 1989, 2000) has charted out several emotion concepts within the framework of the Conceptual Metaphor Theory, I look at how these are represented pictorially in the serial, while also considering some alternative explanations for the same data. For their potential to be language-independent

manifestations of conceptual metaphors, the secondary interest of this study is the role played in the depiction of emotions by the cartoon symbols which Forceville (2011) has termed “pictorial runes.”

With this in mind, the questions this thesis attempts to answer can be phrased as follows, with most of the focus on the first two:

1. How are emotions represented pictorially in the comic serial *The Life and Times of Scrooge McDuck*?

2. What can those representations tell us about the explanatory value of the Conceptual Metaphor Theory?

3. What role do the signs called pictorial runes play in the representation of emotions?

To give a quick summary of how this thesis is structured, this introduction is followed by a section on the theory behind the study, where I give a more detailed account of conceptual metaphors, as well as discuss some criticisms this take on metaphors has faced. Previous studies on comic books from the metaphorical point of view are also considered. Section 3. explains why *The Life and Times of Scrooge McDuck* was chosen as research material and describes the methods used in the analysis. This is followed by the results of the analysis, and then a discussion on how those results reflect on the research questions. The brief conclusion at the end summarises some of the major points raised, discusses the limitations of the study and proposes some ideas for further research on conceptual metaphors.

2. Theoretical Background

In this section I first explore some of the tenets of the Conceptual Metaphor Theory, as well as some of the criticisms and alternative theories, before moving on to discuss metaphors and emotions, and pictorial metaphors. The second part of the theoretical background focuses on comic studies and how comic books as a medium has been used to study conceptual metaphors.

2.1. Conceptual Metaphor Theory

The Conceptual Metaphor Theory (CMT) introduced by George Lakoff and Mark Johnson in their 1980 book *Metaphors We Live By* seems simple enough: according to the theory, human cognition is structured by figurative processes such as metaphor and metonymy, and that these are not merely verbal devices for poets, politicians and other peddlers of flowery prose. Rather, they are the means by which we conceptualise the world (Gibbs 1994, 1). What this means is that many concepts, particularly abstract ones, are understood metaphorically through other, more concrete concepts. This interplay between the abstract and the concrete is the result of what is termed "the embodied mind" (Lakoff and Johnson 1999, 16), which essentially means that thinking is based on bodily experience. Lakoff and Johnson, as well as their colleagues, have gathered an impressive collection of linguistic evidence over the years in support of the theory, and the sheer quantity of data certainly suggests that there might be some fire to go with the smoke.

To illustrate how CMT works, we can take the conceptual metaphor ARGUMENT IS WAR. The target domain ARGUMENT is understood through the source domain WAR: arguments are attacked and defended, ground is gained or lost, the person we are arguing with is seen as an opponent, etc. In other words, these features are mapped onto the target domain from the source domain (Figure 1 below). Several expressions, many of them idiomatic, can then be considered to have sprung from this underlying conceptual metaphor, with some examples being "your claims are indefensible," "he attacked every weak point in my argument," and "his criticism were right on target" (examples from Lakoff and Johnson 1980, 4). As the abstract idea is understood through metaphorical representation, the connection between source and target is not literal: in the case of the ARGUMENT IS WAR metaphor, the competitive aspect of an argument is highlighted while the cooperative aspect is hidden. Other notable

examples include the metaphors LOVE IS A JOURNEY and IDEAS ARE FOOD. As the cognitive scientist and linguist Steven Pinker (2007, 238) phrased it, CMT is essentially "the metaphor metaphor"—TO THINK IS TO GRASP A METAPHOR.

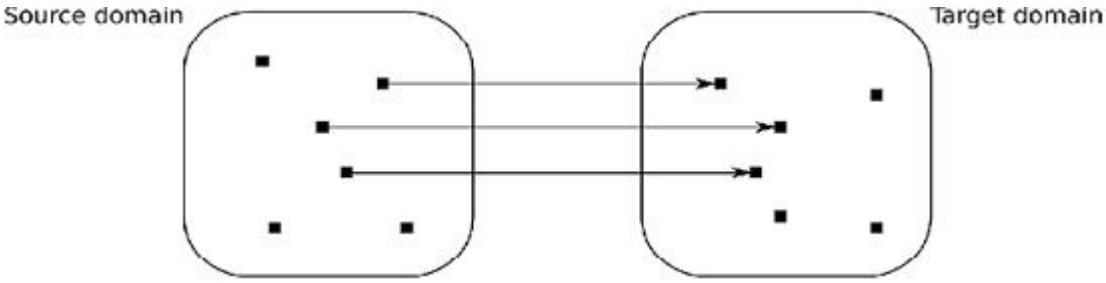

Figure 1. Conceptual mapping (Figure from pubzi.com)

Even seemingly innocuous pronouns and prepositions can have their foundation in physical reality. These include *it* (A SITUATION IS A THING), *among* (AFFILIATION IS PROXIMITY) and *in* (TIME IS SPACE) (examples from Pinker 2007, 236). To take the last of these examples, we can look at some popular ways we have of conceptualising time: we can think of events occupying a certain point in time ("the meeting is at two o'clock"), appointments can be moved around (say, from five o'clock to six o'clock), and time itself can be thought of as having a spatial dimension based on our familiarity with clocks and calendars (two o'clock can be thought of as being below and to the right of one o'clock, and Thursday to the left of Friday and to the right of Wednesday). And while one should not read too much into things, it is nonetheless an amusing thought that time and space might have been closely linked in the human conceptual system long before Einstein showed that there exists a deeper connection between the two.

2.1.1. Brief History of Metaphor

Lakoff and Johnson have naturally received much of the credit for CMT, but the history of metaphor of course has its roots much further back in time than the 1980s. Like in many other areas, scholarly thinking on metaphor was long dominated by the writings of Aristotle (1965), who considered metaphorical language to be a sign of genius in poetry but not of much scientific significance. As a result metaphor was mainly the domain of literary scholars until the late 19th century, when interest among linguists and philosophers was aroused by the French philologist Michel Bréal, who argued in his *Essai de Semantique* (1899) that metaphor was an essential feature of

language and a driving force behind linguistic change. The idea behind target and source domains can be traced back to at least 1936, when I.A. Richards used "vehicle" to describe the metaphorical word (e.g. *war*), "tenor" or "topic" for the word to which is was applied (e.g. *argument*), and "ground" for the meaning of the metaphor. Philosopher Max Black (1962) introduced the interaction view of metaphor, arguing that it is not comparison but interaction between the vehicle and topic that produces the ground of the metaphor. Black used the following analogy to describe the process:

> Suppose I look at the night sky through a piece of heavily smoked glass on which certain lines have been left clear. Then I shall see only the stars that can be made to lie on the lines previously prepared upon the screen, and the stars I do see will be organised by the screen's structure (1962, 41).

This brief history of metaphor is based on Gibbs (1994, 210-218) and McGlone (2007, 110), the latter of whom also notes that while Black's interaction view has been criticised by metaphor theorists for vagueness, they have nevertheless generally embraced it over the comparison view.

2.1.2. Implications of the Conceptual Metaphor Theory

While CMT may seem straightforward enough, it has some considerable implications, and they are by no means lost on Lakoff and Johnson. This is clearly evident in the opening lines of their 1999 book *Philosophy in the Flesh*:

> The mind is inherently embodied.
>
> Thought is mostly unconscious.
>
> Abstract concepts are largely metaphorical.
>
> These are three major findings of cognitive science. More than two millennia of a priori philosophical speculation about these aspects of reason are over. Because of these discoveries, philosophy can never be the same again. (3)

Any theory that claims to upend over two thousand years of philosophical tradition is bound to raise an eyebrow or two. Pinker (who, it needs to be stressed, does not share the views of Lakoff and Johnson on metaphor) rather succinctly puts some of the more profound implications of CMT into words:

> Western philosophy, then, is not an extended debate about knowledge, ethics, and reality, but a succession of conceptual metaphors. Descartes's philosophy is based on KNOWING IS SEEING, Locke's on THE MIND IS A CONTAINER, Kant's on MORALITY IS A STRICT FATHER, and so on. Nor is mathematics about a Platonic reality of eternal truths. It is a creation of the

> human body and senses, growing out of the activities of moving along a path and of collecting, constructing and measuring objects. (2007, 246)

What this particular issue is about is the idea of framing: because concepts that are not strictly experiential in the physical sense are metaphorical in nature, the way we think about them depends on how they are framed, and our disagreements are caused by rival metaphors. One such example became rather timely in the aftermath of the 2004 United States Presidential Election, when Lakoff became the temporary darling of the American left. In his 2004 book *Don't think of the Elephant!*, to which Governor and candidate for the Democratic nomination Howard Dean wrote a glowing foreword, Lakoff discussed how the Republicans had framed tax cuts as "tax relief," suggesting that the Democrats lost the debate before it even started because they allowed taxes to be framed as some form of illness that needed to be relieved. He also argued that the proper course of action would have been to frame taxes as "membership fees" or "insurance" (2004, 24-25). One is of course forced to wonder how such a framing could be done in a successful manner (Pinker [2007, 260] also notes that there is an essential difference between the two besides just framing: "if you choose not to pay a membership fee, the organisation will cease to provide you with its services, but if you choose not to pay taxes, men with guns will put you in jail"), but these ideas nonetheless won Lakoff at least some fleeting glory with the American Democratic Party (it of course needs to be acknowledged that after Lakoff's meetings with Democratic leaders and strategists, they did go on to win the next two Presidential elections, with Hillary Clinton the presumptive favourite to continue the trend in 2016, but it seems more prudent to credit the changing demographics in the swing states rather than Lakoff's endeavours for this development).

2.1.3. Views on Metaphorical Representation

Not all interpretations of CMT are equally dramatic, though they all appear to be plenty controversial. Gregory Murphy (1996) identified what he called the strong and weak views of metaphorical representation. The strong view, in simplest terms, means that there is no direct representation of the target concepts (say the concept of ARGUMENT), and they are only understood through the source, i.e. the target concept only exists through metaphorical representation. The weak view, on the contrary, accepts that the target concepts have direct representation, but metaphors can influence those concepts. Murphy rather categorically deems the strong view to be incoherent, and he has some

compelling reasons to do so. The reason for this incoherence can be summed up with the lack of conceptual misfiring; that is, if we understood arguments only through war, what would prevent people from mapping things like high ground and uniforms? (Ibid., 180) Surely there must be some direct representation of the concept of ARGUMENT to determine what can and what cannot be mapped onto it. The idea of hiding and highlighting certain aspects of the target domain mentioned above alone should necessitate this, as there would be nothing to hide or highlight if the concept existed only through metaphorical representation. Indeed, the strong view is so radical that it hardly seems worth mentioning, were it not for the fact that much of the work by Lakoff and Johnson is remarkably consistent with it.

The weak view is certainly more defensible, but it has its own set of problems. One of these issues is the circularity of evidence, something that will be addressed in more detail below in section 2.1.5., Metaphor and Emotions. Another major concern is the existence of multiple conceptual metaphors for the same domain. Murphy accurately notes that while Lakoff and Johnson have mentioned the phenomenon and listed several such occurrences (LOVE IS A JOURNEY, LOVE IS A VALUABLE COMMODITY, LOVE IS INSANITY), CMT itself does not seem to predict this:

> For example, once one has understood love by conceptualising it as a journey, it is not clear a priori why one would need to further conceptualise it as a battle or union or whatever. (Ibid., 185)

According to Murphy, Lakoff has suggested a skeleton analogy in personal communication to shed light on some of these issues (Ibid., 187). Based on this analogy, domains have a directly represented "skeleton," or the "inherent structure" of the domain. Being only a skeleton, there is plenty of room for different metaphors to operate within this inherent structure while still remaining consistent with it: the metaphors are therefore the "flesh" that is added on the skeleton. This idea too has some serious flaws: if the inherent structure of a domain determines what kind of flesh can be added to the skeleton, then it does not differ in any meaningful way from direct representation; if the flesh being added to the skeleton adds something that is not part of the inherent structure, then it would face the same criticism as levelled against the strong view, namely that there would be nothing to prevent conceptual misfiring. Since this is not the case, Murphy concludes that:

> […] this turns out to be simply a form of direct representation after all, since the inherent structure of the domain must be detailed enough to determine what can and cannot be said about the concept. (Ibid.)

Murphy also suggests an alternative explanation for much of the same data that is often dealt by cognitive metaphor scholars: that of structural similarity (Ibid., 195-197). He proposes that all concepts are directly represented (discarding the strong view of metaphorical representation), and that metaphorical language does not reflect the impact of metaphors on those concepts (thus rejecting the weak view as well). Metaphors therefore would reflect the structural similarity of concepts (such as ARGUMENT and WAR), and not any superficial similarity between them. This structural similarity then allows people to create verbal metaphors, and it is the metaphors deemed most revealing that earn their place in the vernacular and then go on to become conventionalised ways of speaking (Ibid., 179).

Before moving onto emotions and pictorial metaphors, it is necessary to discuss in more detail how metaphorical understanding is thought to take place, and to do so I must introduce a potential rival to CMT, known as conceptual blending.

2.1.4. Conceptual Blending

While CMT certainly enjoys pride of place among cognitive metaphor scholars, it is not the only game in town. A more recent framework, which goes by the name of "conceptual blending" or "conceptual integration," or simply "blending," was introduced by Gilles Fauconnier and Mark Turner in the 1990s (1996, 1998), and it can be considered an alternative explanation for many of the linguistic observations that resulted from CMT, while also attempting to bring the study of metaphor under the same umbrella with other conceptual phenomena. Fauconnier and Turner compiled their ideas in the 2002 book *The Way We Think*, a title grandiose enough to vie with that of Lakoff and Johnson's 1980 book, and the framework in fact does bear some noticeable similarities to CMT; namely, both treat metaphor as conceptual rather than merely linguistic, both consider those metaphors to be based on simple bodily experiences, and both theories employ a sort of mapping between conceptual domains.

However, there are also notable differences between the two theories as observed by Grady et al. (1997). CMT is limited to pairs of representations (A IS B) while conceptual blending allows for more than two. Metaphor within CMT is thought to be directional, meaning that A is understood in terms of B, while this is not the case with blending, as

the name implies. In conceptual blending, there exists a conceptual integration network (Figure 2 below) that usually contains four "mental spaces" (Fauconnier and Turner 2002, 40-44). Two of these spaces are called "input spaces" which are by and large equivalent to the target and source domains of CMT, but there is also a "generic space" that contains what both input spaces have in common. When the shared features of the two input spaces come together in the generic space they form what is called the "blended space," or just the blend. This blend is called an "emergent structure" and it can yield meanings that did not exist in either of the input spaces.

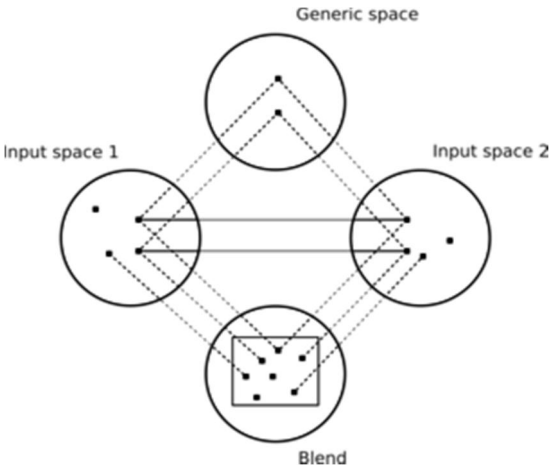

Figure 2. Conceptual blending (Figure from pubzi.com)

What makes the idea of conceptual blending appealing, at least on the surface, is the issue that is known as the "emergent property" problem (Vega Moreno, 2004). To illustrate this problem, we can take the metaphor "this surgeon is a butcher." According to CMT, we would understand the target domain "surgeon" in terms of the source domain "butcher," but this presents a problem when we consider what it exactly means to call a surgeon a butcher. After all, butchers are highly skilled professionals, and nowhere from the source domain of a butcher can one map "incompetence" onto the surgeon. This is where the "emergent structure" of conceptual blending makes its entrance, and it has been suggested that rather than being a rival to CMT, conceptual blending can be seen as being complementary to it (Grady et al. 1997, 121).

However, it needs to be noted that this is not the only explanation for the emergent property problem, and in fact there are interpretations on metaphor where the issue does not even rise. One such example comes from Relevance Theory: here it is suggested that metaphor interpretation is wholly inferential, requiring no mappings from one domain to another, and understanding the emergent properties of metaphors

does not differ from the interpretation of literal expressions (Wilson and Carston 2008). On this view, metaphors exist as one extreme on a continuum of language use, the other extreme being literal utterances, with approximations and hyperbole in-between, and in all cases the search for relevance proceeds just the same. As an example, take the phrase "the water is boiling". Wilson and Carston suggest that whether we take this phrase to be metaphorical or literal (or hyperbole or approximation) depends on our encyclopaedic assumptions based on the concept of BOILING, as well by any other concepts activated by the discourse, and from this we will derive enough information to satisfy the assumption of relevance. To illustrate this point, they list possible encyclopaedic assumptions triggered by the utterance "the water is boiling" (2008, 13):

(a) SEETHES AND BUBBLES, HIDDEN UNDERCURRENTS, EMITS VAPOUR, etc. (metaphorical)
(b) TOO HOT TO WASH ONE'S HANDS IN, TOO HOT TO BATHE IN, etc. (hyperbole)
(c) SUITABLE FOR MAKING TEA, DANGEROUS TO TOUCH, etc. (approximation)
(d) SAFE TO USE IN STERILISING INSTRUMENTS, etc. (literal)

What this boils down to is narrowing and broadening of concepts: going from (d) to (c), the concept of BOILING is broadened to "water that is almost boiling," or BOILING*, and it is again broadened to BOILING** and BOILING*** in (b) and (a), respectively. This view is compatible with the interplay between the concrete and the abstract that is so central to the cognitive theory of metaphor only so far that it can accept experiential concepts to be the origin of polysemy: for example, the original concepts of COLD and HARD surely have their origin in bodily experience, but overtime they have been broadened to COLD* and HARD*, which are necessary to understand a metaphorical expression like "Sally is a block of ice" (Ibid., 34). This holds true for the butchering surgeon as well: all one has to do is open a dictionary to see that one of the secondary definitions of a "butcher" is "one who bungles something," and the metaphor can be understood by the broader concept of BUTCHER*, or even BUTCHER** (Ibid., 25-26). As such there would be no reason to think that any mapping between domains is required to grasp the intended meaning; all that is required is a bit of linguistic knowledge or familiarity with conventional language, and the assumption of relevance.

Criticism that is based on how conventional language is used and understood, however, is just as much a problem for CMT as it is for conceptual blending, if not even more

so, as can be seen when we take a look at how emotions have been studied from the metaphorical point of view.

2.1.5. Metaphor and Emotions

> Love is a smoke raised with the fume of sighs;
> Being purg'd, a fire sparkling in lovers' eyes;
> Being vex'd, a sea nourish'd with lovers' tears:
> What is it else? a madness most discreet,
> A choking gall, and a preserving sweet.
> —William Shakespeare, from Romeo and Juliet

Whether it is wallowing over unrequited love, raging over real or imagined injustices, or grieving the deaths of friends and family, metaphors have always been there, ready and willing to lend a helping hand. Aristotle had considered them to be a mark of mastery over language, and accordingly many great artists have made their bids for immortality by expressing figuratively the inner turmoil inherent to the human condition. But within the framework of CMT, the idea has been advanced that it is not only artists and hopeless romantics who speak metaphorically of their feelings, but that virtually everything we can express about our emotions is metaphorically structured.

Already in *Metaphors We Live By*, Lakoff and Johnson identified a number of conceptual metaphors that they consider to govern how emotions are structured in the mind. Many of these can be divided into two types of metaphors: orientational metaphors and container metaphors, though they mainly focused on the former type. Orientational metaphors of emotions, as the name implies, are structured according to spatial orientation of the concepts, and they can be expressed as the conceptual metaphors HAPPY IS UP and SAD IS DOWN, with instantiations such as "that boosted my spirits" and "thinking about her always gives me a lift" when it comes to the former and "he's really low these days" and "my spirits sank" for the latter (1980, 14-15). The sheer number of expressions in the English language related to these emotions that are based on orientation, as well as the consistency between said expressions, certainly suggests that there might be something very substantial behind the idea that these conceptual metaphors can tell us something about the way we think. But suggestion is not enough, and Keysar et. al. (2000) remind us of how easy it is to succumb to circular reasoning when using linguistic evidence to reach profound conclusions about how the mind works:

> How do we know that people think of happy and sad in terms of up and down? Because people talk about happy and sad using words such as up and down. Why do people use expressions such as his spirits rose? Because people think of happy in terms of UP. (2000, 577)

In their study on reading and comprehension speeds of metaphorical versus literal language, they found little evidence to support the idea that conceptual metaphors are necessary to understand conventional language that is thought to be metaphorical within the framework of CMT. While they did note that it is certainly plausible that some form of conceptual mapping takes place to understand novel metaphors such as "I'm feeling lower than a piece of gum stuck on the bottom of your boots," there should be no reason to utilise the mapping SAD IS DOWN to understand a conventional phrase like "I'm depressed" (Ibid., 579).

Despite these criticisms, much valuable work has been done to demonstrate the significance of metaphor to emotions, if not in the way we think about them then at least in the way we speak of them. Zoltán Kövecses in particular has produced an impressive body of work in charting out emotion concepts (1986, 1989, 2000). He has identified a large number of metaphors and metonymies that characterise major emotions such as anger, fear, love and pride, and it is container metaphors that play the leading role here. Kövecses argues that metaphors such as THE HUMAN BODY IS A CONTAINER FOR EMOTIONS and others are essential to our conceptualisation of emotions (1986, 144), the most common and perhaps most productive emotion metaphor being ANGER IS THE HEAT OF A FLUID IN A PRESSURISED CONTAINER, which can be considered a verbalisation of the folk theory or Idealised Cognitive Model for anger. Other studies have also identified container metaphors as prototypical (Peña Cervel 2001), and there is evidence that these metaphors are by no means culture or language specific: Richard Levy (1973, 285) quotes a Tahitian informant as saying that "the Tahitians say an angry man is like a bottle. When he gets filled up he will begin to spill over."

With a system of conceptual metaphors of emotions charted out as well as an abundance of expressions supposedly motivated by those metaphors, emotions appear to be an excellent choice when examining potential metaphorical representations in a

visual medium. But before moving on to discuss how pictorial metaphors have been studied within CMT, it is necessary to give a brief explanation of what exactly is meant by the above mentioned Idealised Cognitive Models.

2.1.6. Idealised Cognitive Models

In cognitive linguistics, Idealised Cognitive Models (or ICMs) can be defined as idealised models of reality. The term was first used by Lakoff in 1982, and he used Charles Filmore's take on the word "bachelor" to illustrate the idea:

> The noun *bachelor* can be defined as an unmarried adult man, but the noun clearly exists as a motivated device for categorizing people only in the context of a human society in which certain expectations about marriage and marriageable age obtain. Male participants in long-term unmarried couplings would not ordinarily be described as bachelors; a boy abandoned in the jungle and grown to maturity away from contact with human society would not be called a bachelor; John Paul II is not properly thought of as a bachelor. (Filmore 1982)

Lakoff elaborates the point by writing that the word "bachelor" in no way takes into consideration things like the existence of priests and homosexuality, and is therefore idealised, meaning that it is knowledge based on experience of the world that nevertheless has no objective correlative in reality (1982, 49-50). Elsewhere he uses the word "week" and related words such as "Tuesday" and "weekend" as examples of ICMs, arguing that the concept of "weekend" requires the concept of "work week," which again has no objective existence in nature: it is something human beings have created. This same reasoning applies to "week" and "Tuesday," and he cites the five-day work week and two-day weekend being culture specific as evidence of the fact (1987, 68-69).

The idea of ICMs is a rather intriguing one, and as was previously mentioned it has been embraced by Kövecses in his work on emotion concepts, particularly in his effort to chart out the "folk theories" behind them. If we look at the example used above in section 2.1.5., Metaphor and Emotions, Kövecses (1986, 12) expresses the "folk theory" or ICM of the concept of anger as follows:

> The physiological effects of anger are increased body heat, increased internal pressure (blood pressure, muscular pressure), agitation, and interference with accurate perception. As anger increases, its physiological effects increase. There is a limit beyond which the physiological effects of anger impair normal functioning.

The conceptual metaphor ANGER IS THE HEAT OF A FLUID IN A PRESSURISED CONTAINER can be considered a verbalisation of the ICM of anger, and according to Kövecses (Ibid., 28-29) the prototypical scenario of it involves five stages: (1) offending event, (2) anger, (3) attempt to control anger, (4) loss of control, and (5) act of retribution.

As discussed above, Kövecses has compiled an extensive list of metaphors and metonymies related to emotions, as well as their instantiations in spoken and written language, and the existence of vast quantities of expressions related to emotions that are seemingly closely related is certainly an interesting thought. However, questions still remain what exactly is the cause of such seeming familiarity between these expressions, and whether or not that familiarity is even all that significant besides being linguistic trivia: one suggestion to resolve these questions has been to look at multimodal and pictorial communication, and that is the focus of the next section.

2.1.7. Pictorial Metaphor

Because one of the basic principles of CMT is that metaphors are a matter of cognition rather than language, it has been proposed that they should not be limited to verbal discourse and should also be present in other forms of communication, such as visual communication, and that by studying metaphors is contexts outside verbal discourse some of the criticism regarding circularity could be countered (El Refaie 2003, Forceville 2002, 2005, 2011). Relatively little research has been done on pictorial (or visual) metaphors[1], and there have been some differing views on exactly what even constitutes one. An early study of pictorial metaphors defined them to be a kind of hybrid image: an image where both the target and source domains are physically represented in a single "homospatially unified figure" (Carroll 1994, 214). This definition did not remain unchallenged, and it has been pointed out that Carroll's views on pictorial metaphors relied heavily on surrealist art (Forceville 2002). While there is a clear difference between verbal and pictorial metaphors, namely that pictorial metaphors can use a combination of images and text (or sounds when it comes to cinema and other moving pictures) to express target and source domains, in effect making them multimodal metaphors rather than just pictorial, Forceville goes on to state that when it actually comes to determining whether or not an image is

[1] This type of metaphors have been called both visual and pictorial, but Forceville and others seem to prefer the latter term. Following their example, "pictorial metaphor" will be used when referring to them in this thesis.

metaphorical, the questions that need to be answered are very much the same as with verbal metaphors:

1. Which are the two terms of the metaphor, and how do we know?
2. Which is the metaphor's target domain and which the metaphor's source domain, and how do we know?
3. Which features can/should be mapped from the source domain to the target domain, and how is their selection decided upon? (2002,12)

Francisco Yus (2009) has also written about the difference between pictorial and verbal metaphors from a cognitive pragmatics point of view, and he argues that only the way in which we perceive the metaphors are different, as there is naturally a difference between decoding linguistic messages and looking at images. When it comes to actually understanding the metaphor, however, he finds that we utilise very similar kinds of mental procedures that he calls "adjustment of conceptual information" (Ibid., 147). While Yus' argument is compelling, it is not entirely clear that it supports CMT in any significant fashion. In explaining the relationship between verbal and pictorial metaphors, he writes that many of the latter kind "involve what can be called re-visualization of conventionalized verbal metaphors, which is extensively used by cartoonists" (Ibid., 167). What this means is that pictorial metaphors can make the metaphorical meaning behind conventionalised expressions clear, essentially breathing new life into "dead" metaphors. Yus explains the process in more detail (he uses the word "cartoon" because of the choice of material for his study, but in this context it can refer to any creative pictorial metaphors):

> Several steps are involved in the comprehension of the cartoons that fit this quality: (a) initially, an image is much more effective (i.e., vivid) than the range of coded options available to communicate a thought. (b) A metaphor is created that contains a schema as a referent. This schema contains visual sensory information. (c) Repeated use of the metaphor makes it lose its sensory vividness and it ends up becoming conventionalized and hence people stop regarding it as a metaphor. (d) The cartoonist takes this conventionalized metaphor and re-visualizes it, as it were, forcing the reader to re-incorporate into its processing all the sensory vividness that the metaphor had already lost. (Ibid., 167)

As an example of this, Yus describes an editorial cartoon by El Roto depicting Earth with a gulf between Southern and Northern hemispheres, with people attempting to leap from the South to the North and falling into the abyss between the two. This, Yus argues, reveals the metaphor THE DIFFERENCE BETWEEN NORTH AND SOUTH IS AN ABYSS that had been lost through conventionalisation when people speak of a gulf or a gap

between the rich north and the poor south. Problem comes from point (c), which assumes that an expression that has become conventionalised to the degree that people have ceased to regard it as metaphorical is still metaphorical at some conceptual level. Just because a literal interpretation of an expression produces an image that can be clearly metaphorical does not automatically mean that the expression was such all along, its metaphorical nature lurking somewhere in the conceptual system, ready to pounce (it is important to stress that the objection to this is not that a phrase like "there is a gulf between North and South" cannot be considered metaphorical; the question is whether any metaphorical conceptual thinking or mapping between domains is required to use and make sense of it. A more parsimonious explanation would be simple polysemy, or Murphy's idea of structural similarity).

Despite these questions, or perhaps because of them, further studies on pictorial metaphors within the framework of CMT are needed to better understand how they fit into the realm conceptual metaphors, and there happens to be another realm perfectly suited for this purpose, that of comic books.

2.2. Comic Studies

The time period between late 1930s and early 1950s is typically referred to as the Golden Age of Comic Books, but it was not until the 1980s that comics as a medium started receiving serious scholarly attention. The books by Will Eisner (1985) and Scott McCloud (1993) in particular are considered to be key texts in the field that has come to be known as comic studies. Eisner's book *Comics and Sequential Art* highlighted the sequential nature of the medium and took a holistic approach to the study of comic books, something that has been a marked feature of the field ever since. Because the primary interest of the present study is pictorial representations of emotions and their possible relationship with conceptual metaphors, with comic books judged to be a fertile hunting ground for such representations, the attention paid on comic studies on a more general level is unfortunately going to have to be cursory at best. While some books on comic studies do include sections on metaphor (Herkman 1998), the studies that have taken the cognitive view of metaphor into account are relatively few in number, and it is these that I focus on.

The most relevant studies for the purposes of this study are those of Charles Forceville (2005) and Bart Eerden (2009). Forceville charted out pictorial representations of the

ICM of anger in the *Asterix* album *La Zizanie* (published in English as *Asterix and the Roman Agent*), and on this model Eerden based his study of two additional *Asterix* albums (*Asterix Légionnaire* and *Asterix et Latraviata*, published in English as *Asterix the Legionary* and *Asterix and the Actress*), as well as two animated *Asterix* films: *Asterix et la Surprise de César* and *Asterix chez les Brétons* (released in English as *Asterix versus Ceasar* and *Asterix in Britain*). Both Forceville and Eerden found that the majority of pictorial representations of anger were at least commensurate with, if not outright motivated by the ICM of anger that can be verbalised as ANGER IS THE HEAT OF A FLUID IN A PRESSURIZED CONTAINER. They also noted that two distinct categories of signs used to convey information could be discerned: what can be called metonymically motivated signs (such as facial expressions, hand movements, and other signs with real-life counterparts), and what are called "pictorial runes," signs such as movement and speed lines that have no physical referent in reality. The latter category is discussed in more detail in section 2.2.2.

While Forceville in particular has been prolific in studying metaphorical representations in comic books, such as in his study of Japanese manga with Michael Abbott (2010), and while both he and Eerden acknowledge the possibility that some pictorial representations of emotions are "visual translations of verbal manifestations of ICM" (Forceville 2005, 83), neither discussed the issue at any length, which is somewhat surprising considering that should this turn out to be the case, then the claim that studying pictorial metaphors could offer insight into CMT is seriously compromised: after all, if the majority of pictorial signs that Forceville and Eerden reported are either conventional ways to convey information pictorially or visual translations of verbal expressions, then the hypothesis that they might serve as evidence for a metaphorical conceptual structure would be on shaky ground. These visual translations would also seem to be equivalent to the "re-visualisations" of Yus (2009).

Before focusing more closely on pictorial runes, it is worthwhile to take a look at how Disney comics have hitherto been handled within comic studies.

2.2.1. Disney Comics

That name Disney is of course most often associated with animation, for good reasons: starting with *Snow White and the Seven Dwarfs* in 1937, the company has released a

series of animated feature films that have had an enormous impact on popular culture. However, they also have a long and storied history of releasing comic books, but surprisingly few studies to date have focused on this side of their output, and even fewer on the world of Donald Duck, with most of the work focusing on the company as a whole (Griffin 2000) or translating the comics (Grun and Dollerup 2003). This lack of scholarly interest is further highlighted by the fact that the academic spotlight seems to have almost entirely missed the likes of Al Taliaferro and Floyd Gottfredson, and it was not until 2006 that the first critical study of the works of perhaps the most well-known Duck artist, Carl Barks, was published in English: *Carl Barks and the Disney Comic* by Thomas Andrae focused on Barks' critique of modernity and his satire of western materialism.

While Don Rosa does not seem to have fared much better with scholars than his predecessors, he has been a particular favourite with MA students in Finland. At least seven MA theses and one doctoral dissertation in recent years have looked at his work from various perspectives, including how history is represented in the comics (Kotro 2011). The doctoral dissertation by Katja Kontturi (2014) examined textual and visual depictions of the fantasy genre in Rosa's work. None of these theses are directly related to the present study, but they do offer a glimpse of the depth found in Rosa's output.

2.2.2. Pictorial Runes

The signs that are referred to as "pictorial runes" have been called by many different names over the years. Some of these include "cartoon symbols" (McCloud 2006), "markings" (Knutsson 1979) and "effects" (Herkman 1998), but since this study is most closely comparable to the work done by Forceville (2005, 2011) and Eerden (2009), I follow their example, and the term "pictorial runes" is used from this point on.

Simply put, pictorial runes include movement and speed lines, spikes, droplets and other signs of their kind (see Table 1 below for the most common runes). As opposed to pictograms (for example € or ♪), which have a conventionalised meaning even when encountered outside comic books, Forceville has defined pictorial runes as "non-mimetic graphic elements that contribute narratively salient information" (2011, 875). The subdivision of signs by the semiotician George Sanders Peirce offers some useful terminology when discussing this particular pictorial phenomenon. Peirce claimed that

people think only in signs, and Peircean semiotics divides signs into three categories: iconic, indexical and symbolic. Iconic signs are connected to the signified through resemblance. Examples of such signs would be photographs or portraits, but iconic signs are not limited to the visual, and for example sound effects would be iconic signs of whatever they happen to sound like. Indexical signs make the perceiver think of the signified through a physical connection between the sign and the signified. This is often the result of cause-effect relations, for example smoke signifies fire. When it comes to emotions, a tear can signify sadness or a red face can signify anger (or other emotions, such as embarrassment). Symbolic signs differ from the previous two as they are entirely artificial. Examples of symbolic signs are most verbal expressions, with the exception of few onomatopoeic words, as it is a completely arbitrary human convention that the word "cat" signifies that particular type of feline in the English language, a fact made obvious by the variety of languages that have wildly different words for the creature. It is also important to note that no categorisation is perfect and a sign can belong to more than one category (for a look at the Peircean subdivision within the study of metaphors, see Danaher 1998; Sørensen et al. 2007; Mittelberg 2008).

When it comes to pictorial runes, they generally do not seem to qualify as iconic signs as they are a method of conveying information in static images and therefore have no equivalent in reality. The question then is, are pictorial runes as used in comic books motivated (indexical) signs or arbitrary (symbolic) signs. Forceville, who has compiled a list of all pictorial runes that appear in the comic album *Tintin and the Picaros* (2011) as well as in Japanese manga based on a study by Shinohara and Matsunaka (2009), considers them to be motivated, and speculates that CMT with its related idea of "embodied mind" can offer an explanation for at least the origin of the runes (2011, 887).

		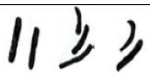						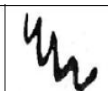				
Speed lines		Three types of movement lines		Droplets		Spikes		Spiral		Twirl		Popped-up vein

Table 1. Pictorial runes. Table taken from Forceville et al. (2014).

A major difference between Forceville and some of the earlier writings on pictorial runes that needs to be noted is that Forceville has a much narrower definition of signs of this type. For example, Herkman (1998) considers symbolic marks such as a lightbulb that indicates a brilliant idea or a log being sawn that indicates deep slumber to be forms of pictorial runes (which he calls “effects”). For the purposes of this study, however, I decided to stick to Forceville’s narrower view, and not concentrate on signs that can be considered to be pictograms. What is more relevant is that Herkman also writes that while cartoonists can be creative with these signs, the signs themselves have become conventionalised in the medium over a period of time lasting at least a century (1998, 44-47). This seems highly probable, given that Forceville’s table of the most common runes (Table 1 above) only has seven types of runes (and based on admittedly limited knowledge of the medium, they certainly seem to account for the majority of such signs, though signs related to speech balloons were also included for this study. Full list of signs is presented below in section 3., Material and Methods). As such one might very well accept Forceville’s idea that metaphor can be a potential explanation for the origin of the runes, but that still leaves quite a bit of doing before one can make claims of their use and understanding on a conceptual level, just as there are similar issues with conventional verbal expressions.

3. Material and Methods

In this section I first introduce the research material, as well as give reasons why it was deemed suitable for the purposes of this study. This is followed by a detailed account on how the analysis was carried out.

3.1. Material

The material for the study is the twelve-part comic serial titled *The Life and Times of Scrooge McDuck*, which was written and drawn by the American comic book author Don Rosa between 1991 and 1993 based on the character originally created by another renowned Disney artist, Carl Barks. Why comics in general were chosen as material for this study was mainly based on the assumption that the medium makes for an ideal hunting ground for pictorial representation of emotions, and although those representations are undoubtedly exaggerated, studies have shown that comic gestures are generally understood to mean very much the same as their counterparts in the real world (Fein and Kasher 1996). Why *The Life and Times of Scrooge McDuck* in particular was chosen is mainly due to its artistic qualities: the serial, which received the Will Eisner Comic Industry Award for ”Best Serialised Story” in 1995, represents Rosa’s relatively realistic approach to the Donald Duck universe, or Duckverse, with particular attention to detail. It was thus assumed that Rosa’s style is well suited for analysing potential metaphorical representation in pictorial material.

The serial tells the life story of Scrooge McDuck, whose globetrotting adventures and treasure hunts take him from his humble beginnings in Scotland to constructing the Money Bin, a massive vault full of cash and priceless artefacts on a green hill at the centre of the city of Duckburg, and finally becoming the richest duck in the world. The emotions to be analysed were chosen based on which of the major emotions that Kövecses has charted could be expected to feature prominently in the serial, and it was decided to focus on anger, fear and pride. Although not as ill-tempered as his famous nephew Donald, Scrooge has a sufficiently short fuse that demonstrations of anger abound in his story, and no adventure story worth its salt would lack plenty of hair-raising moments. And while pride was unlikely to be as well represented given its more limited narrative role, some instances could still be expected to appear: Scrooge’s legendary greed and parsimony are very much motivated by the great pride he feels over every penny he has earned, and the importance of family and his Scottish heritage

play a significant role in the serial. One major emotion that Kövecses has charted that was excluded from the analysis is love: while at least a handful of examples of the emotion would have been provided by Scrooge's star-crossed tryst with the Klondike music hall singer Goldie O'Gilt, as well as the meeting between Scrooge's sister Hortense McDuck and Quackmore Duck, the parents of Donald Duck, it was decided that the material would not provide enough data for a meaningful analysis of how the concept of love is represented.

Before elaborating on the methods of the analysis, it is necessary to stress that despite the material, the focus of the analysis is not on comics as a medium, but on pictorial metaphors and metonymies of emotions. Therefore many features of comic books, such as narrative aspects, are only of interest in so far as providing the necessary context for the unambiguous identification of emotions.

3.2. Methods

The method for analysing the material was adapted from the one used by Forceville (2005) and Eerden (2009) in their analyses of pictorial representations of the ICM of anger in *Asterix* comic book albums, as well as from Forceville's study (2011) of pictorial runes in the comic album *Tintin and the Picaros*. I first made an inventory of characters displaying the three emotions selected for the study (i.e. anger, fear and pride), as well as of the accompanying pictorial signs that are used to convey these emotions. It was expected that anger would be the most common of the three emotions, owing to its importance in driving narrative, but that the other two should also be amply represented. Most of the signs of these emotions were expected to be relatively straightforward cases of metonymically motivated signs, albeit in a stylised and often outlandish manner befitting a comic book. Examples of these are characters changing colour (red from anger) or shaking, which are based on everyday knowledge of certain physical phenomena that are linked to emotional outbursts.

Once the data was gathered, I analysed the panels that contained characters displaying one or more of the emotions chosen for the study based on Kövecses's work on emotion concepts to see how the signs of emotions reflected those concepts. As Forceville remarks, there is a risk of circularity in this method, as it is the very signs that are being studied that are partly responsible for us determining that the character in question is displaying a certain emotion in the first place. However, he also notes

that factors excluded from the analysis, such as verbal information and our real-life knowledge of situations that cause certain emotions, diminish the risk of circularity (2005, 75). Unlike Forceville and Eerden, I also considered alternative explanations outside conceptual metaphors for the data in an attempt to evaluate the explanatory value of CMT when it comes to both conventional and novel pictorial representations of emotions, as by doing so I hoped to reach some conclusions on the explanatory value of CMT in general.

In Table 2 below, I present the major signs of emotions that were included in the analysis, as well as a brief description of each sign. Many of the signs were taken directly from the studies carried out by Forceville and Eerden on pictorial representations of anger, but some were added to account for fear and pride based on Kövecses' emotion concepts. One of the signs used in the previous studies was titled "bulging eyes," which was changed to "v-shaped brow" for the present study. The reason for this was that the word "bulging" does not seem to accurately describe the eyes themselves, and can prejudice one to interpret the sign in terms of certain metaphors, namely PRESSURE IN A CONTAINER. Also note that some signs are specific to certain emotions, for example "red face" only appeared in connection with anger, "raised brow" with fear and "raised chest" with pride.

Signs of Emotions	Description
V-Shaped Brow	Character has vertical lines between their eyes with at least one of their eyes open.
Closed Eyes	Character has both their eyes shut.
Raised Brow	Character has their eyebrows run diagonally up towards the centre of their forehead.
Wide Mouth	Character has their mouth open with their tongue visible.
Tight Mouth	Character has their mouth closed but their teeth remain visible.
Hand/Arm Position	The position of the hands or arms of a character interpreted as contributing to the depiction of an emotion: includes outstretched arms, arms emphatically close to the body, and closed fists.
Red Face or Eyes	The face or eyes of a character turn red.
Ex-Mouth	Something, typically saliva, is ejected from the mouth of a character.
Shaking	Character is interpreted to be shaking when two or more movement lines appear parallel to the contours of their body.
Smoke	Character has a dark cloud appear over their head.
Raised Head	Character has their head titled backwards.
Raised Hair	Character has their hair stand on end (or rather feathers, as is the case with ducks).
Raised Chest	The chest of a character is noticeably inflated.
Hat	Character has their headwear ejected into air without any obvious physical cause.
Bold Font	Word(s) inside a speech balloon are written in bold font.
Jagged Lines	The lines of a speech balloon have sharp edges, instead of rounded or smooth ones.
Droplets	Drops of liquid or tiny dots appear around the head of a character.
Spikes	Black lines, often in a semi-circle, appear around a character.

Table 2: Pictorial Signs of Emotions

4. Results and Analysis

In total 211 pages containing 1,664 panels were analysed, and 472 characters were interpreted to display anger, 175 fear, and 93 pride. In this section I present the results related to each emotion individually with some commentary, particularly on how the representations of anger compare with the results of Forceville (2005) and Eerden (2009). This is followed by a discussion on how the results as a whole reflect on the research questions.

4.1. Pictorial Representations of Anger

As was expected, of the three emotions chosen for the study, anger proved to be the most common, with 472 unambiguously angry characters identified in 1,664 panels. The most frequent signs of anger in the entire twelve-part comic serial are presented below in Table 3. For a breakdown of the signs of anger by chapter, as well as those of fear and pride, see the Appendix.

Signs of Anger	**Count (%)**
V-Shaped Brow	409 (87%)
Closed Eyes	25 (5%)
Wide Mouth	185 (39%)
Tight Mouth	128 (27%)
Red Face/Eyes	18 (4%)
Hand/Arm Position	227 (48%)
Ex-Mouth	32 (7%)
Bold Font	45[2] (10%)
Jagged Lines	150 (32%)
Droplets	47 (10%)
Spikes	99 (21%)
Smoke	6 (1%)
Shaking	13 (3%)

Table 3. Signs of anger in the comic serial The Life and Times of Scrooge McDuck. Percentages rounded to the nearest percent.

Before discussing the results further and comparing them with those of Forceville and Eerden, some brief comments on how the data were gathered are necessary. Only characters that were visible in the panel were counted, and if more than two characters

[2] Since this study used the Finnish translation of the comic serial as research material, it has to be noted that the sign ”bold font” may not reflect Rosa’s work, as there is no guarantee the translation kept the original bolding of the text. Cursory glance of the original texts suggests that Rosa’s use of the bold font was much more liberal than in the translation.

displayed the same emotion in a panel, only those with a speech balloon were included in the analysis. Also excluded were characters who were engaged in a fight or any other act requiring physical exertion, as it was impossible to discern signs of anger from those of other possible explanations, such as pain or exhaustion. Note that the signs in any one group, for example those related to eyes, do not add up to 100 percent: in some cases the angry characters may have been depicted from too far away for details to be clear, or for instance a hat or a helmet may have covered too much of their eyes for an unambiguous judgement to be possible. On few instances characters were also depicted as silhouettes, which naturally made certain aspects of their appearance unclear.

Figures 1-5 were chosen to demonstrate the most typical signs of anger that appear in the serial, while Figures 6-9 are considered more unique cases. As the number of angry (and frightened and proud) characters in the serial are in the hundreds, the examples are by no means exhaustive, but they should give a clear idea of how Rosa has systematically depicted each emotion pictorially. The numbers attached to each Figure indicate the page and panel number where each image appears in the serial (for example, in Figure 1, the 29.2. means page 29, panel 2). Astute readers may notice that some images have higher page numbers than the 211 that were analysed (Figure 9 for instance is 267.7.). This is simply because the serial included Rosa's thoughts on every chapter as well as his page-sized cover arts for each story, all of which were excluded from the analysis.

Figure 3. 29.2. Angus McDuck (left): V-shaped brow, wide mouth, hand/arm position (closed fist), jagged lines, droplets (sweat), ex-mouth, spikes.

Figure 4. 61.6. Scrooge (left): V-shaped brow, wide mouth, hand/arm (closed fist), ex-mouth, jagged line, spikes.

Figure 5. Scrooge (left): 125.8. V-shaped brow, wide mouth, red face, ex-mouth, jagged line, bold font, droplets, spikes, shaking.

Figure 6. 128.2. Scooge (right): V-shaped brow, tight mouth, red eyes, jagged line, bold font.

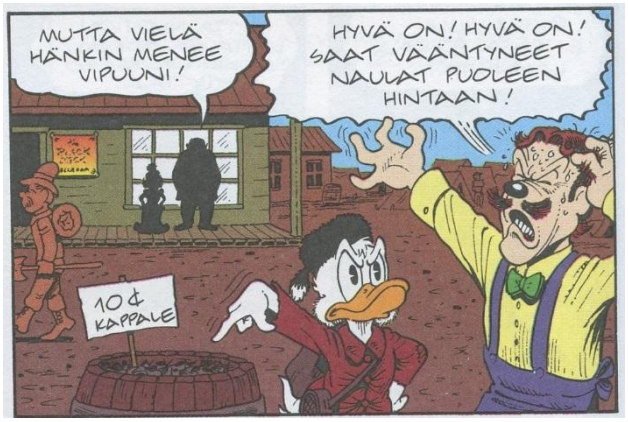

Figure 7. 168.4. Vendor (right): Closed eyes, hand/arm (outstretched arm), jagged line, droplets, spikes.

Figure 8. 85.5. Scrooge (left): v-shaped brow, tight mouth, hand/arm (closed fist). Howard Rockerduck (right): v-shaped brow, wide mouth, hand/arm (closed fist). Both: electricity.

Figure 9. 123.8. Scrooge: v-shaped brow, tight mouth, hand/arm (close to the body) red eyes, jagged line, shaking, sparks.

Figure 10. 205.9. Quackmore Duck (centre): Closed eyes, hand/arm (closed fists, arms outstretched), ex-mouth, jagged line, droplets, spikes, screw. Hortense McDuck (right): v-shaped brow, wide mouth, hand/arm (closed fists), jagged line, droplets.

Figure 11. 267.7. Scrooge: Closed eyes, wide mouth, hand/arm (closed fists, arms outstretched), red face, jagged line, droplets, spikes, glasses.

The most conspicuous result is of course the major role that the eyes, mouth and arms play in depicting emotions. This should come as no surprise; after all, eyes are the windows to the soul, and arms and mouth are the most animated and expressive parts of the body. This is also very much in line with the results of Forceville and Eerden, and it would have been quite a shock if that had not been the case. Since these are all in a category Forceville termed “metonymically motivated signs,” it means that they should be motivated by our real-life knowledge and experiences, and as such it feels rather self-evident to say that an angry person is depicted with a furrowed brow, or that a character in the midst of an outburst of anger would shout (accompanied by the sign “wide mouth” as in Figures 3-5) and that someone attempting to control themselves would bite down on their anger (“tight mouth” in Figure 9). The sign “red

face" is also very much within line of the anger metonym REDNESS IN FACE AND NECK AREA identified by Kövecses, with its related expressions such as "he flushed with anger" and "she was scarlet with rage" (1988, 13).

However, the manner in which some of these very common signs were used to convey anger in *The Life and Times of Scrooge McDuck* does offer some interesting comparison points to what Forceville and Eerden observed in the *Asterix* comic albums. According to their analyses, the sign called "v-shaped brow" ("bulging eyes" in their studies) can be understood in terms of interior pressure, while "closed eyes" can "suggest both the pressure on the body-container in the stage of suppression, or it can suggest a bodily accompaniment of released anger—perhaps interpretable in terms of Kövecses' 'physical dysfunctioning'" (Forceville 2005, 81). Some concern over their choice to use the term "bulging eyes" to describe this particular sign was already raised above in section 3.2., so I will not dwell on the issue here. What is more pressing is that to consider two mutually exclusive signs rather straightforward instantiations of the ICM of anger, verbalised as the conceptual metaphor ANGER IS THE HEAT OF A FLUID IN A PRESSURISED CONTAINER, is somewhat problematic when these signs can seemingly have widely different interpretations. Of course no single sign by itself depicts anger or any other emotion, and context is always king, but some consistency should be required before those signs can be accepted as evidence of underlying metaphorical or metonymical structures in the conceptual system.

Consider for example Figures 7, 10, and 11. In each case a character in the midst of an outburst of anger is depicted with closed eyes, and while the sign "closed eyes" does appear with characters attempting to keep their cool (see the middle panel of Figure 12, below), it is typical in the serial that when an angry person (or duck) has their eyes closed, their temper has got the better of them. This is very different from would have been expected based on Forceville, who concluded that "closed eyes" are associated with the suppressed state of anger; no such generalisation could be made based on *The Life and Times of Scrooge McDuck*, and as can be seen in Figure 9, "v-shaped brow" is very much present with characters about to explode with anger. Of course it needs to be noted that in the *Asterix* comics the division between "v-shaped brow" and "closed eyes" was much more even, with closed eyes appearing more frequently in one of the three albums analysed, while in *The Life and Times* only 5 percent of angry characters had "closed eyes" to 87 percent that had "v-shaped brow." Some of this

discrepancy may be the result of the "v-shaped brow" sign after all being more inclusive than their "bulging eyes" sign, but this would not explain the low number of irritated ducks with their eyes shut.

A similar issue in different guise can be seen in relation to the sign called "hand/arm position." Forceville came to the conclusion that there are at least three positions that are related to anger: close to the body, closed fist, and pointing with the index finger, with the first two particularly associated with controlling anger, while the third is associated with an eruption of anger (2005, 81). This is an interesting point because in *The Life and Times*, the angriest characters are almost universally depicted with closed fists, as seen in the Figures above. So while the argument can be made that arms close to the body tend to signify an attempt to keep anger inside the body container (Figure 9) and outstretched arms often accompany a failure to contain it, which is commensurate with the ICM of anger, to extend the connection to the level of fingers seems to be a case of overreaching based on limited material. Taken together, these issues highlight some of the more general problems with much of the writing within the framework of CMT, namely that any unexpected results are often not thought to pose any problems to the theory itself, but only taken as evidence of other underlying conceptual metaphors. Signs such as those related to the eyes and arms can likewise be interpreted to support the metaphor ANGER IS THE HEAT OF A FLUID IN A PRESSURISED CONTAINER, or perhaps other, less common ones such as ANGER IS A DANGEROUS ANIMAL, regardless of what those signs are. This question of unfalsifiability is an important one, and it is be returned to in more detail in section 5.3.2. below.

One issue when considering Kövecses' delimitation of anger in the comic medium with its sequential nature is that the economy of space necessary means that much of the context can often be lost between the panels, something that would not be a problem for example in animation. As a result not all stages of the prototypical model of anger discussed in section 2.1.3. are always, or even often, represented. There are exceptions, however, and one case in particular is a wonderful illustration of the ICM of anger:

Figure 12. 195.3-5. The prototypical model of the ICM of Anger. N.B. The third panel originally appeared below the first panel, but in the interest of space and for a more pleasurable reading experience it has been edited to appear next to the second one. As a result the image quality may have suffered, and should not be taken to reflect the original quality of the artwork.

In Figure 12, we have (1) the offending event and (2) anger (Scrooge's sisters taunting Scrooge and him turning red in the first panel), (3) attempt to control anger (Scrooge shaking from anger in the second panel), and finally (4) loss of control and (5) act of retribution (Scrooge screaming at his sisters in the third panel). But while this does demonstrate the descriptive power of a metaphor such as ANGER IS THE HEAT OF A FLUID IN A PRESSURISED CONTAINER, the elephant in the room is that these depictions of anger are highly conventionalised, offering little reason to accept them as evidence of conceptual metaphorical representation. Perhaps novel metaphors and pictorial runes are better suited for that purpose.

4.1.1. Novel Pictorial Metaphors of Anger

What is meant by novel metaphors in this context are pictorial metaphors that cannot be considered to be conventional, or at least common, ways to depict anger in a visual medium. The relative dearth of such metaphors can be taken to support the view that many of the pictorial ways to convey anger are highly conventionalised, but there are some examples. Consider Figure 10: a solitary screw has appeared under Quackmore Duck during an eruption of anger. Of course the anger is clearly depicted even without the screw, and it is entirely possible that someone perusing the comic would not even notice the tiny fastener. But should they make note of the bolt, how would it be interpreted? We could think of it in terms of the metaphor ANGER IS INSANITY combined with another metaphor, MIND IS A MACHINE. The loss of a fastener in the

machine would then be thought of as resulting in a malfunction of sorts, manifesting itself as loss of control. However, it also has to be noted that a phrase like “he has a screw loose” would be a perfectly natural expression to describe someone who appears to be mad with rage, and as such this would be a case of re-visualisation of a verbal metaphor based on Yus (2009).

A screw appears on one other instance in the exact same context, making it a rare yet systematic sign in the serial to indicate anger. A comparison can be drawn with the sign “smoke,” a more conventional but still sparsely used sign with 1% rate of appearance (this parsimonious use of the sign “smoke” was also reported by Forceville and Eerden in the *Asterix* comic albums, with a total of three angry characters accompanied by a cloud of smoke in three albums). It could be argued that some form of conceptual metaphor such as MIND IS A MACHINE is necessary to understand the screw, while “smoke,” which can be considered an even more obvious instantiation of the metaphor ANGER IS FIRE, can be understood more directly as a conventional sign of anger. This would be very much in line with Keysar et al. (2000), who found that novel verbal metaphors may require conceptual mapping to be understood, while conventional ones do not.

Another interesting case can be seen in Figure 8, with a bolt of electricity appearing in the air between the eyes of Scrooge and Howard Rockerduck. Because based on Kövecses at least there does not seem to be any systematic way of conceptualising anger in terms of electricity, one might speculate that there is some other related metaphor at play here, for example TENSION IS ELECTRICITY. Of course when we consider that so far we have needed to think of ANGER in terms of HOT FLUID IN A PRESSURISED CONTAINER, FIRE, INSANITY, as well as related metaphors such as MIND IS A MACHINE and TENSION IS ELECTRICITY, things are starting to feel crowded, and one is forced to wonder how all these metaphors can form a coherent conceptual whole.

4.1.2. Pictorial Runes and Anger

Looking at the signs called pictorial runes in the comic serial produced some varying results. First it has to be noted that although speed and movement lines, perhaps the most readily understood and familiar runes, did appear in connection with characters included in the analysis (movement lines appearing with 12% of angry characters, speed lines with only 2%), these signs were not thought to have contributed to the

representations of the emotions (exception of course being when movement lines were used to depict a character shaking), and as such they fall outside the scope of this thesis. Some other popular runes identified by Forceville, such as spirals and twirls, were not used by Rosa at all. “Droplets” and “ex-mouth” appeared in connection with 10 and 7 percent of angry characters, respectively, and if they are interpreted as sweat in the case of “droplets” and spit in the case of “ex-mouth,” they are iconic signs and therefore would require very little elaboration. This certainly seems to be the case with the “ex-mouth” sign, as all the clear instances are similar to those in Figure 3 and 5, where it indeed appears to be spit that is ejected from the mouth. “Droplets,” however, seem to have more variety to them, and the sign is discussed in more detail in section 4.3., as its role appears to be more significant in depicting fear.

The signs called “spikes” are an interesting case. Forceville (2011, 879-880) observes that in connection with persons, they usually serve one of two purposes: either a generic effect akin to “droplets,” or to signify sound when placed next to the mouth (or other parts of the body that produce sounds). This feels intuitively true, but interestingly enough Rosa does not seem to use the second type of this rune at all. Consider Figures 3-5: in Figure 3 the spikes originate from the eye only; in Figure 4 they appear almost all around Scrooge’s head, but stop just short before it could be unambiguously stated that they are actually coming from his mouth; and finally in Figure 5 they certainly can be linked to Scrooge’s mouth, but only because they cover most of the panel, and even then this is a rare case. Generally the spikes seem to originate in everywhere but the mouth, as seen in Figures 10 and 11. Though common with anger, appearing with 21% of angry characters, it seems that Forceville’s view that they are potentially a generic effect is accurate when it comes to this particular emotion, but as is discussed below in section 4.5., they may not be entirely arbitrary in all cases.

The final set of runes relate to how emotions are conveyed in speech balloons. These are the signs “bold font” (with 10 percent of angry characters) and “jagged lines” (32%). Bold font was the less common and more straightforward one, and as Forceville puts it, it has become a highly conventional way of expressing loudness; it can be explained through the metaphor MORE OF FORM IS MORE OF CONTENT, and this loudness is metonymically connected to anger (2005, 82). Forceville also speculates on the motivation behind the jagged lines:

> Specifically, we can be reminded that angry persons speak "sharply" rather than "smoothly," that an "edge in somebody's voice suggests irritation, and that a sharp rim in an object, as opposed to a smooth one, can hurt us. (Ibid.)

This certainly feels like a plausible explanation, but it would also suggest that at least this particular rune is what can be termed a "visual translation" of verbal expressions. After all, if it is necessary to use phrases like "speak sharply" or to talk of the "edge" in someone's voice to explain it, then the jagged line around a speech balloon would simply be a visualisation of how we would typically speak of someone whose anger is audible in their voice.

4.2. Pictorial Representations of Fear

Fear was the second most common emotion in the serial, with 175 instances. As was the case with anger above, the most frequent signs are first presented below in Table 4, followed by Figures 13-19 to demonstrate the typical depictions of this emotion, as well as some rarer cases. These are once again followed by some commentary. As there are no previous studies to offer points of comparison, the analysis is based mainly on what Kövecses has written on the concept of FEAR, though supported by other writings on metaphorical representation when applicable.

Signs of Fear	**Count (%)**
Raised Brow	160 (91%)
Closed Eyes	4 (2%)
Wide Mouth	71 (41%)
Tight Mouth	30 (17%)
Hand/Arm Position	62 (35%)
Ex-Mouth	14 (8%)
Bold Font	28 (16%)
Jagged Lines	95 (54%)
Droplets	119 (68%)
Spikes	12 (7%)
Shaking	5 (3%)
Raised Hair	25 (14%)
Hat	30 (17%)

Table 4. Signs of fear in the comic serial The Life and Times of Scrooge McDuck. Percentages rounded to the nearest percent.

Figure 13. 12.1. Fergus McDuck (left): Raised brow, wide mouth, droplets (large drops).

Figure 14. 51.6. Beagle Boy 176-716 (left): Raised brow, wide mouth, hand/arm position (pointing), droplets (swarm of dots). Beagle Boy 176-617 (right): Raised brow, wide mouth, droplets (swarm of dots), bold font, jagged lines, hat.

Figure 15. 61.1. Scrooge (right): Closed eyes, wide mouth, jagged lines, droplets (large drops, sweat).

Figure 16. 67.5. Scrooge: Raised brow, pupils, wide mouth, ex-mouth, jagged lines, bold font, raised hair, droplets (swarm of dots), hat.

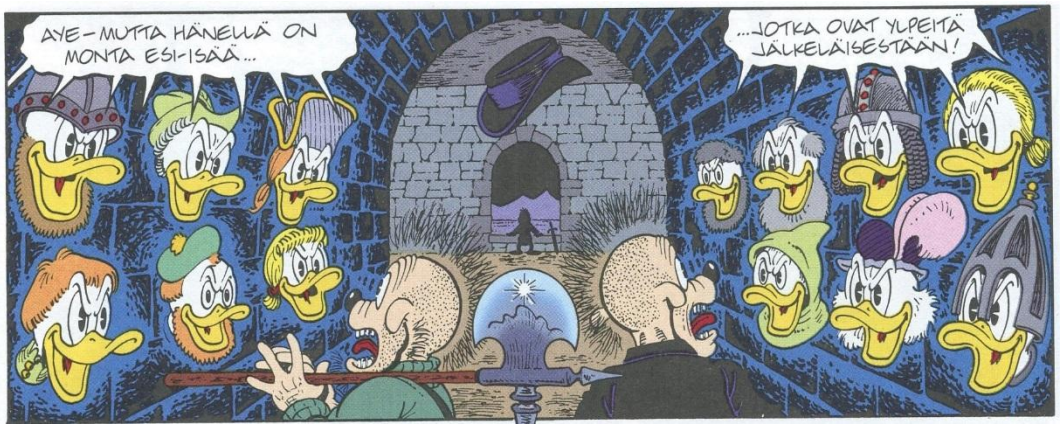

Figure 17. 112.5. Fenton Whiskerville (centre right): hat. Both: raised brow, pupils, wide mouth, raised hair (hair jumps out of the head).

Figure 18. 211.10. Scrooge (left): Raised brow, wide mouth, droplets (swarm of dots), glasses. Beagle Boys (all): Raised brow, tight mouth. Blackheart Beagle (right): anchor.

Figure 19. 234.1. Scrooge (left): Raised brow, pupils, wide mouth, ex-mouth, hand/arm position (arms outstretched), jagged lines, bold font, raised hair, droplets (swarm of dots).

The best place to begin discussing the representations of fear is perhaps the principal metaphors and metonymies that are present in the serial, which also serve to highlight how these representations differ from those of anger. Note, for instance, that there was not a single instance of the sign “red face” in connection with a frightened character. This is very much in line with the fear metonymy BLOOD LEAVES FACE, with related expressions such as “she turned pale” and “you are white as a sheet” (Kövecses 1989, 70). Of course since most of the frightened characters in the serial are ducks, one cannot make any comment on their possible paleness, but the lack of the sign “red face” alone is telling. Another metonym, PHYSICAL AGITATION, covers the sign “shaking”; “she was trembling like a leaf,” “Dick quivered like a rabbit” (Ibid.).

However, considering some of the common ways of talking about fear, it does seem rather peculiar that "red face" is not a more common representation, both in the serial and language in general. Why it should be common in relation to anger is rather clear from conceptual metaphoric point of view: according to Kövecses, both anger and fear can be conceptualised in terms of FLUID IN A CONTAINER, but only in the case of anger is it hot fluid, the redness of the face then being the result of heat. But one wonders, other than conventionalisation, why both INCREASE IN HEART RATE ("his heart pounded with fear," "my heart leapt into my throat") and LAPSES IN HEARTBEAT ("his heart stopped when the animal jumped in front of him," "you made my heart miss a beat") can be used to talk about fear when the opposite of BLOOD LEAVES FACE does not seem to be in use: it would not be any great wonder if increased heart rate caused by fear would lead to blushing.

The most interesting aspect of the metonymically motivated signs of fear is how the eyes have been depicted. While the division between the signs related to eyes was stark in relation to anger, it is even more dramatic here: only 2% of frightened characters had their eyes shut, compared to 91% who had the sign "raised brow," but the intriguing cases are when the pupils appear to jump out of the eyes, as seen in Figures 16, 17 and 19. This happens a total of ten times in the entire serial, and the sign of course brings to mind the Wolf from the famous animated cartoon short *Red Hot Riding Hood*, directed by Tex Avery in 1943, though in that particular instance it was lust rather than fear being depicted. These overactive pupils could be interpreted in a similar fashion to the sign "hat," which is commensurate with the conceptual metaphor FEAR IS FLUID IN A CONTAINER, and both signs would denote failure to contain said fear. But it is also possible to think of the sign in terms of a conventional metaphor "to jump out of one's skin," a rather vivid mental image that has been put to comedic use in a wide range of visual entertainment, from *Looney Tunes* to the daily comic strip *Calvin and Hobbes*.

Before moving on to discuss the significance of the sign "droplets," a few words on the ICM of fear are necessary. While anger has a rather elegant verbalisation for its ICM in the form of a conceptual metaphor, this does not appear to be the case with fear. Instead, there is a combination of metaphors and metonymies from which Kövecses (1989, 79) has identified what he considers to be the five stages of the prototypical scenario of fear: (1) danger, (2) fear exists, (3) attempt at control, (4) loss

of control, and (5) flight. As a prototype this may very well be accurate, but it is not really reflected in *The Life and Times of Scrooge McDuck*, and there is room to speculate why this is the case. The most plausible explanation would seem to be the medium itself: because the artist has limited space at their disposal, this prototype simply does not make much sense narratively. In practice this means that if there is flight, the fear is sudden with no attempt to control oneself, as observed in Figure 13. This also means that if there is an attempt to control fear, this will probably not end in flight, but rather overcoming that fear: in Figure 16 we see terrified Scrooge, but this fear ends with him charging at the fossilised beast despite his terror.

4.3. Droplets of Fear

The most eye-catching statistic in relation to fear was the prevalence of the rune called "droplets," appearing with 68 percent of the depictions of this emotion. On the surface this might not even be considered all that interesting, as it could simply be explained by the fear metonym SWEATING ("the cold sweat of fear broke out," "her palms were damp when she entered the boss's office")(Kövecses 1989, 72), but what is curious is the variety that the droplets have. Consider Figures 13, 14, and 15: in Figure 15 we see rather realistic though profuse sweating, which could be considered an iconic sign akin to "ex-mouth"; in Figure 13 we see large solitary drops, which, if not entirely unrealistic, are at the very least highly unusual; and Finally in Figure 14 we see a swarm of dark dots bursting out of the terrified Beagle Boys.

General observation that can be made based on these "droplets" is that the greater the shock, the greater the likelihood that this multiplication occurs. This would certainly be commensurate with the FLUID IN A CONTAINER metaphor, if we imagine that the tiny things burst out of the body-container as a result of overwhelming pressure. But an alternative explanation would the broadening of concepts discussed by Wilson and Carston (2008). If we take the droplets that resemble sweating to be a literal or at least approximate depiction, the large solitary drops and the swarm of dots would fit neatly onto a continuum. This would also mean that the metaphorical extreme of the continuum would not even be reached, as the tiny dots would more accurately be described as hyperbole.

Some form of broadening may also be present in the signs "hat" and "raised hair." In total 17% of frightened characters had their headwear fly off, but in one instance the

hat stayed firmly put while the tiny anchor attached to it jumped up into the air (Figure 18). This could be interpreted as a kind of visual synecdoche: the anchor stands for the hat, in which case this would be an example of narrowing rather than broadening. The sign "raised hair" is of course commensurate with the fear metonym HAIR STRAIGHTENS OUT ("the story of the murder made my hair stand on end"), and along with hair turning white it is a perennial favourite of ghost stories. It seems likely that this sign indeed does have its origin in bodily experience, namely *cutis anserine*, or goose bumps, which is then used in exaggerated manner befitting the medium of comic books, an extreme example being hair literally jumping out of the heads of the hapless Whiskervilles in Figure 17.

One aspect of the sign "hat" that is worth commenting further on is how common it is in the serial in relation to fear, yet it is almost entirely absent from depictions of anger: there is only one instance in the serial where the hat flies off a visibly angry character, along with one instance of a potentially related sign where it is the glasses that jump up (Figure 11). Metaphorically speaking, the sign would almost certainly be interpreted in terms of release of pressure from the body-container, so it is not immediately obvious why Rosa is frugal in his use of the sign in relation to anger yet generous in relation to fear. One might speculate that in the serial the sign "hat" is used as some type of extension to the sign "raised hair," but given the pervasiveness of hair-related expressions in language when it comes to fear, it is perhaps a safer bet to keep "raised hair" as a separate type; one that is almost certainly a visual exaggeration of conventional views on fear.

4.4. Pictorial Representations of Pride

Before presenting the results on the pictorial representations of pride in the serial, it is necessary to discuss briefly how this emotion differs from the two looked at thus far. The main difference is the intensity of the emotions: anger and fear can be thought of in terms of "fight or flight," meaning they have considerable impact on behaviour, as they are usually caused by external factors. Pride, on the other hand, is often self-caused through achievement, and has less obvious visual cues (Kövecses 1990, 191-192). Another issue is the existence of related emotions: while it is certainly possible to confuse the previous two emotions with something else (for example fear with surprise), pride has several closely related emotions, such as vanity and conceit, which can make unambiguous interpretation rather difficult. It should then be kept in mind

that judging whether or not a character counted as displaying pride necessary required more personal judgment than the depictions of anger and fear, where context typically made things clear, and as such the results for this section are inevitably more subjective.

With that being said, 93 characters in the serial were interpreted as being proud. As above with anger and fear, the most common signs of pride are presented below in Table 5, followed by examples and commentary.

Signs of Pride	**Count (%)**
V-Shaped Brow	26 (28%)
Closed Eyes	27 (29%)
Wide Mouth	31 (33%)
Tight Mouth	12 (13%)
Hand/Arm Position	69 (74%)
Bold Font	5 (5%)
Jagged Lines	5 (5%)
Spikes	52 (56%)
Raised Head	19 (20%)
Raised Chest	18 (19%)

Table 5. Signs of pride in the comic serial The Life and Times of Scrooge McDuck. Percentages rounded to the nearest percent.

Figure 20. 13.7. Fergus McDuck (centre): Wide mouth, hand/arm position (arms outstretched), raised head, spikes.

Figure 21. 14.8. Fergus McDuck (left): Closed eyes, hard/arm position (close to the body), raised head.

Figure 22. 186.1. Scrooge: Closed eyes, wide mouth, hand/arm position (arms outstretched), jagged lines, spikes.

Figure 23. 162.5. Scrooge (centre): V-shaped brow, hand/arm position (closed fists), raised head, raised chest.

Figure 24.192.8. Scrooge (centre): Tight mouth, hand/arm position (closed fists, arms outstretched), raised head, raised chest, spikes.

Figure 25. 215.8. Beagle Boy 176-617 (left): Wide mouth, hand/arm position (arms outstretched), spikes. Blackheart Beagle (centre right): v-shaped brow, hand/arm position (closed fist, index finger), spikes, raised chest.

Figure 26. 232.5. Scrooge (centre): Closed eyes, (raised chest?).

The striking thing about the pictorial representations of pride in the serial is that they appear to be almost entirely metonymically motivated. This was somewhat expected based on Kövecses, as the only major metaphor for pride he lists is PRIDE IS A FLUID IN A CONTAINER, as well as a closely related one, PRIDE IS A FLUID IN THE HEART (1986, 43), though in relation to self-esteem there are metaphors such as PRIDE IS A PERSON ("her pride was deeply injured") and PRIDE IS AN OBJECT ("he kept his pride") (Ibid., 49-51). But while the signs of pride seem to have been mainly metonymically motivated, it is rather difficult to discern any clear pattern based on Kövecses' emotion concepts.

Consider first how the eyes of proud characters were depicted. Very few angry or frightened characters had their eyes shut, but in representations of pride there was an almost even split between "closed eyes" (29%), "v-shaped brow" (28%), as well as eyes that did not fit into either category (such as half-closed eyes seen in Figure 24). Should one want to embark on some adventurous conjecturing, the relative abundance of "closed eyes" on proud characters might be connected to the pride metonym INTERFERENCE WITH ACCURATE PERCEPTION: "she was blinded by her own glory" (Ibid., 40), but as the results were so scattered, they are perhaps too inconclusive to make any such generalisation. Being blinded by pride would also seem to veer closer to conceit, which might very well be the case with the fabulously wealthy Scrooge boasting of his success in Figure 22, but at least in Figure 21 we see Fergus McDuck displaying genuine pride for his son.

This lack of any obvious pattern is also present in the sign "hand/arm position." Some cases, such as Figure 22, can certainly be interpreted in terms of the pride metonym OSTENTATIOUS/THEATRICAL BEHAVIOUR ("he's just a show-off") (Kövecses 1986, 42), but it would seem that limbs play a secondary role to posture in depictions of pride. This is mainly represented by the signs "raised head" and "raised chest," appearing in connection with 20% and 19% of proud characters, respectively. Of course it needs to be noted that identifying them can require a bit more subjectivity than is desired; as Eerden (2009, 251) notes, changes in posture are a tricky thing to discern in static images, which necessarily limits the number of instances that can be unambiguously interpreted in terms of these two signs. Consider for instance Figures 23 and 24, which seem to contain rather clear examples of the sign "raised chest," while Figure 26 offers a more borderline case. But regardless of how often they appear, they nevertheless seem to be rather straightforward instantiations of the metonymies CHEST OUT ("he swelled with pride") and HEAD HELD UNNATURALLY HIGH ("she's going around with her nose in the air") (Kövecses 1986, 41-42).

A brief note on a sign that was missing in relation to pride: although based on Kövecses (1986, 40) there is a pride metonym REDNESS IN THE FACE ("he flushed with pride"), the sign "red face" remains exclusive to anger in the serial. It would seem that in visual communication at least a crimson countenance has become so strongly associated with certain emotions (such as anger, love and, embarrassment) that even if there are common verbal expressions that connect blushing with emotions such as pride and fear, they are generally avoided in pictorial representations.

A general observation that can be made is that the pictorial representations of pride in the serial would appear to be less outlandish than those of anger and fear, which might very well be a consequence of the intensity of the emotions. As a more subdued emotion, pride most likely offers the artist less opportunities to get creative with their depictions, and as a result there was a distinct lack of signs that could be thought of as novel metaphors, or even metaphors at all. This seems to be somewhat related to Murphy (1996, 198) observing that a possible reason why there can be more expressions of one thing being spoken of in terms of another instead of vice versa could simply be that people are more likely to want to speak about one thing over the other; anger and fear might simply be more interesting to most people than pride, resulting in there being more expressions for the first two. This may not be that far off

the mark if we go by the prototypical ICM of pride, which is rather straightforward in comparison to anger and fear: (1) subject perceives X as an achievement, and (2) subject is proud of X and exhibits behavioural reactions: chest out, erect posture, etc. (summarised from Kövecses 1986, 48).

4.5. Spikes of Pride

The only pictorial rune that had a significant role in the representations of pride was the sign "spikes," appearing in connection with 56% of all proud characters. It was noted above in section 4.1.2. that "spikes" might be a generic effect akin to "droplets," and this certainly appears to be the case when it comes to representations of anger and fear, but there seems to be more to the story in relation to pride. First it has to be noted that the sign does not seem to have any connection to "droplets," at least as far as pride is concerned. There was only one instance in the serial where the latter sign appeared in connection with a proud character (Figure 24), but as this panel shows the aftermath of a feat requiring enormous physical exertion, it was interpreted as a sign of exhaustion rather than pride and was thus omitted from the results.

The most straightforward interpretation would then be that the sign is motivated by the pride metonym BRIGHTNESS OF THE EYES ("she was beaming with pride")(Kövecses 1986, 40), assuming that we take these "spikes" to be rays of light, despite them generally being black. In some cases the glowing is made even more obvious, such as in Figures 22 and 24. Having pictorial runes that can be interpreted as being metonymically motivated can however lead to some confusing terminology, something that is returned to below in section 5.1., Pictorial Runes and Emotions. It also needs to be noted that the sign appears to have many uses not related to emotions at all.

The sign "spikes" being such a prevalent indicator of pride reveals that the analysis was carried out with something of a tunnel vision. The study necessarily required that a character is interpreted as displaying a certain emotion, but emotions are of course not mutually exclusive. As such the assertion that "spikes" are a generic effect in relation to for instance anger might be in need of reassessment, at least in some cases. For example, in Figure 3 we see "spikes" coming out of the eyes of the furious Angus McDuck, but it can be said that the old sea dog's fury is largely caused by an affront

to his dignity. In instances like this, the concept of ANGER can thus contain the concept of PRIDE.

5. Discussion

This section is divided into three parts, each of which focuses on one of the research questions. The first part discusses the role of pictorial runes in depicting emotions, as well as their possible connection to CMT. The second part discusses how the pictorial representations of emotions in *The Life and Times of Scrooge McDuck* reflect on Kövecses' emotion concepts, and the third attempts to bring all the results together in a discussion on the explanatory value of CMT in general.

5.1. Pictorial Runes and Emotions

When it came to pictorial runes in relation to emotions, the catch was admittedly light. Many of the most common runes, such as twirls and spirals, were not used in the serial at all, and others, such as movement and speed lines, were not judged to have contributed to the representations of emotions. This is unfortunate for a number of reasons, the chief among them being that there in fact does appear to be some interesting possibilities in CMT helping to explain at least the origin of the runes, though this explanatory power may not necessarily extend to how they are presently used and understood. The limited amount of data naturally makes it difficult to reach any drastic conclusions, but the results of the analysis did bear enough fruit to allow for some discussion.

To begin with, it can be concluded that Forceville (2011, 887) is most likely correct in his assertion that pictorial runes are indexical rather than symbolic signs, barring few instances where they can be considered to be iconic ones, as seems to be the case with the "ex-mouth" sign. Of course depending on how strictly we define pictorial runes, the fact that this sign was iconic might disqualify it from being a pictorial rune altogether and place it firmly in the camp of metonymically motivated signs. In discussing possible motivations behind these runes, it then seems prudent to focus on the indexical signs, particularly those that had the most obvious connections to emotions.

The most prominent runes used in the depictions of emotions were the signs called "droplets" and "spikes." The former of these can certainly be thought of in terms of the "embodied mind," as it seems clear it has its origin in bodily experience, namely sweating. But while the use of this sign could be explained by a conceptual metaphor, FLUID IN A PRESSURISED CONTAINER, it can also be explained by the broadening of

concepts. In such interpretation there would be no need to understand the sign through anything but itself, which would mean that metaphors do not even play a part in the process. As such a metaphor like FEAR IS A FLUID IN A CONTAINER could be considered to be descriptive rather than explanatory, at least in this case.

The idea of broadening works as a rather elegant explanation for the sign "droplets" because it seems to have a clear, physically experiential origin. This is less evident with the sign "spikes"; after all, people beaming with pride generally do not tend to project rays into their surroundings. Moreover, "spikes" are by no means limited to depictions of emotions, nor do they appear only in connection with human (or anthropomorphised) characters, but also in connection with inanimate objects. In the case of pride, the sign may very well be a simple visual translation of a verbal expression involving glowing, but given that these "spikes" appear to be the all-terrain vehicle of pictorial runes, that still leaves questions open regarding their origin and the possible motivations behind them. As "spikes" in all their various roles but those related to emotions were excluded from the analysis, conjecture on this front is difficult, but their variety does invite comparisons to polysemy. Simply looking at the signs as they are presently used, however, is unlikely to shed light on their history, but their polysemous usage might provide some clues for future researchers.

The sign "spikes" also raises some terminological issues. As this thesis has mainly followed Forceville's terminology, signs of emotions which have their origin in recognisable physical phenomena are called "metonymically motivated signs" to distinguish them from pictorial runes, but given that the rune "spikes" can in the case of pride be considered to have been motivated by a metonym identified by Kövecses (BRIGHTNESS OF THE EYES), this division may be misleading. Considering that Forceville (2011, 875) defined pictorial runes as "non-mimetic graphic elements," perhaps simply calling signs that do not belong to this category "mimetic signs" would suffice. This would also feel somewhat more impartial, as metaphors and metonymies are central to CMT; having a group of signs referred to as "metonymically motivated" might prejudice one to interpret them in terms of the theory.

For the purposes of this study, the major question concerning pictorial runes is naturally whether or not metaphorical representation is required to use and understand such runes. Given alternative explanations like conceptual broadening, the answer would appear to be no, with some reservations. As Herkman (1998) noted, these runes

have been conventionalised over a long period of time, which means that simply studying the runes themselves only offers sufficient material to speculate on their motivation in the narrative, but not their motivation in the mind. At the very least there would appear to be little evidence to support a conclusion that metaphorical representation alone would be sufficient to account for these runes.

Whether the unexpected lack of pictorial runes in the representations of emotions was the result of Rosa's artistic style or the particular emotions chosen for the study (or perhaps emotions in general) is an interesting question in itself, but one that cannot be definitely answered based on present material. It does seem plausible that Rosa's relatively realistic style may have caused him to avoid or at least be frugal in his use of certain runes, which would mean that the decision to use his work as research material based on its realistic approach to the Duckverse may have been somewhat misguided, at least as far as pictorial runes are concerned. Despite this, exploring the origin and development of these runes would appear to be a worthwhile pursuit for any connoisseur of comic books with academic ambitions, regardless of whether that journey will lead to metaphor or somewhere else entirely.

5.2. Some Thoughts on Emotion Concepts

As the research question concerning the way emotions are represented pictorially in the serial was largely covered above in the section Results and Analysis, some further thoughts on how the emotion concepts identified by Kövecses accounted for those representations seems to be in order to set the stage for a discussion on CMT in general. At first glance the results certainly seem encouraging, as most of the pictorial representations of emotions were at the very least commensurate with Kövecses' emotion concepts, but this of course leads to a question that has underlain much of the discussion so far: are those concepts truly explanatory or merely descriptive? It would appear that the stronger case can be made for the latter possibility.

To begin with, we can consider the fact that all three emotions chosen for this study can be conceptualised in terms of the LIQUID IN A CONTAINER metaphor. The universality of this metaphor by itself is not all that significant as it can be considered a subtype of the conceptual metaphor THE HUMAN BODY IS A CONTAINER FOR EMOTIONS, but this metaphor in turn does raise a simple question: is it even a metaphor? Emotions are of course mental states, and by definition they exist within

the body. It does not seem immediately obvious why the word “container” should be interpreted metaphorically when a literal interpretation of the body as a container for everything within it, from feelings to organs, seems just as reasonable, if not even more so.

And should we take the literal view of the body as a container, the prevalence of emotions being represented in terms of liquid in a container would be just as clear as it is under a system of closely related conceptual metaphors. Taking Murphy’s idea of structural similarity, we can imagine that at some seemingly inconsequential moment in time an outburst of anger reminded someone of something they had been cooking (or rather reminded many people at many points in time), and the resulting metaphors were deemed revealing enough to become conventional expressions. These expressions can of course be grouped under the conceptual metaphor ANGER IS THE HEAT OF A LIQUID IN A CONTAINER so elegantly that it is almost a shame to criticise it, but as Keysar et al. (2000, 577) observe, do children not understand anger before they understand hot liquid in a container? Something similar can be observed based on the present study: if we take a metaphor like TENSION IS ELECTRICITY, it seems rather dubious to suggest that human understanding or experience of tension between people was somehow altered in the 19th century when electricity started to become a household word.

But perhaps the main problem with the emotion concepts from the point of view of CMT is the interplay between the abstract and the concrete. On the surface it seems obvious that abstract and complex concepts like major emotions would be understood metaphorically within CMT, but when we consider that the difference between an abstract and a concrete concept seems to be defined by bodily experience, it becomes less clear why emotions would need to be represented metaphorically rather than directly. And when we consider that there are plenty of expressions where emotions are used to characterise physical phenomena (for example “raging storm” and “roaring winds” for what could be considered instantiations of the metaphor A STORM IS AN ANGRY PERSON), it does not seem self-evident that emotions would be considered “abstract” in the sense that the word is used within CMT.

Above examples of weather being thought of in terms of emotions were from Kövecses (1986, 117-118), who acknowledges this problem of concrete concepts being understood through supposedly abstract emotion concepts, and he presents a rather

peculiar solution to it. He introduces the idea of "secondary metaphorisation" (Ibid., 118), according to which abstract concepts which have been structured by concrete ones can then be used to further structure the concrete concepts originally used to understand the abstract ones. But as Murphy (1996, 192) notes, it is not explained why concrete concepts would require further structuring, and this idea of secondary metaphorisation does not seem to have been embraced within the study of conceptual metaphors more generally. One can think of some very good reasons why that is the case: should it be that sufficiently understood abstract concepts could essentially function as concrete ones, linguistic studies in particular would feel futile at best. If an abstract concept that has been understood through a concrete one would then be used to understand concrete concepts, how would a linguist go about determining when a concept is being understood through another one, rather than the other way around?

One trend that has emerged in the course of this study so far is that for every question emotion concepts, and perhaps CMT in general, answer, they seem to raise several new ones. Some of these questions form the basis for the discussion on CMT and its potential explanatory value.

5.3. On the Conceptual Metaphor Theory

The most dominant theme so far has been the descriptive versus explanatory power of conceptual metaphors, particularly when it comes to how conventional language is used and understood, as is to be expected when attempting to form any judgement on the explanatory value of CMT. What makes this an exceedingly complex question is that to find an answer to it, one is forced to make claims, or at least assumptions, on how the human mind works. The idea of "the embodied mind" at the centre of CMT naturally does just that, but the implications of such an idea go so far beyond linguistics that one instinctively feels that non-linguistic evidence is needed to support it, as the relationship between the mind and the body is by no means a matter of language alone. This topic of mind-over-matter has after all been a source of fascination for thinkers and artists alike since time immemorial, and it was stirringly summarised by Morrissey when he sang "does the body rule the mind, or does the mind rule the body? I dunno."

Any definite answer to such a profound question involving free will and other philosophical, psychological and biological considerations is of course well beyond the scope of this study, but that is not to say that there is nothing to add to the rather

equivocal conclusion of the Manchester crooner, at least as far as conceptual metaphors are concerned. To get started on this discussion on the explanatory value of CMT, it is necessary to make a few observations on how pictorial material fared in a study focusing on conceptual metaphors.

5.3.1. Pictorial Material and Conceptual Metaphors

The decision to use the comic serial *The Life and Times of Scrooge McDuck* as research material for this study was largely based on scholars like Forceville suggesting that pictorial and multimodal communication is well suited to countering the criticism regarding the circular nature of many of the studies carried out within the framework of CMT. On the surface this certainly feels plausible, as surely there are differences between visual and verbal communication, but this compelling premise notwithstanding, it is with some disappointment that it has to be concluded that at least based on the present study this claim would appear to hold little water: the criticism of circularity remains just as valid for pictorial metaphors as it does for verbal ones when it comes to finding metaphors in the mind.

The main issue is the nature of pictorial metaphors. As based on Forceville (2002) and Yus (2009), understanding pictorial metaphors involves grasping the two terms of the metaphor (target and source), and it is only the presentation that would appear to change in comparison to verbal metaphors. This makes it a perfectly reasonable interpretation that most or even all pictorial metaphors are simply visual translations of verbal ones. Of course it has to be acknowledged that this may be the result of a personal failure to break free from the bonds of language, and I certainly make no claims of being an authority on artistic or any kind of visual expression, but nevertheless it seems very difficult to even imagine a pictorial metaphor that cannot be expressed verbally, and the results of the analysis would seem to suggest this being the case, as no metaphors that did not have very natural verbalisations were found in the material.

To be clear, the intention is not to question the ability of artists to express visually what others may not be able to express verbally, but to doubt that a visual medium alone is sufficient to break the circularity of linguistic studies involving conceptual metaphors. If most or perhaps even all metaphors that cognitive metaphor scholars find in pictorial communication are reducible to verbal expressions in the form of A IS B, or

to idiomatic expressions like “to jump out of one’s skin,” we are left none the wiser: are these metaphors genuine language-independent manifestations of conceptual metaphors, or are we only engaging in post-hoc rationalisation to make them support the theory? As such it has to be concluded that while the idea of pictorial and multimodal metaphors offering additional evidence in support of CMT is certainly an enticing one, in practice studying these metaphors is not significantly different from a strictly textual analysis of conceptual metaphors, and is thus prey to the same criticism of circularity.

The conclusion that pictorial material is not considerably different from verbal material from the point of view of conceptual metaphors is rather unfortunate, as we are then left with yet another linguistic case study of material that can be interpreted to be chock full of manifestations of conceptual metaphors, particularly in relation to ANGER. But should we interpret it as such?

5.3.2. Conceptual Metaphors and Unfalsifiability

Based on how the analysis was carried out, and treating the results of the analysis as a typical example of what would be expected from a study focusing on conceptual metaphors, some observations can be made on how the present study reflects on criticisms beyond circularity that CMT has faced. One issue that was noted during the analysis of pictorial representations of anger in section 4.1. above was unfalsifiability, with many of the signs of anger being open to be interpreted in terms of the metaphor ANGER IS THE HEAT OF A FLUID IN A CONTAINER (or other conceptual metaphors), regardless of what those signs are, something that is a noticeably common feature in studies on conceptual metaphors. The unfalsifiable nature of these studies would not be that much of a concern if CMT was used mainly as a linguistic model for looking at patterns in language use, but what makes it a pressing issue is that often these studies assign attitudes and views to people based on whichever conceptual metaphors are interpreted as structuring their speech or writing, no matter how conventional their use of language may be. This is not to say that people never let their prejudices slip into their choice of words, but it seems unlikely that someone using a conventional expression like “a Dutch treat” harbours any secret ill-will towards the fine folks of the Netherlands, despite the origin of the phrase being an ethnic slur (example from McGlone 2007, 123).

McGlone (Ibid., 114) also makes some suggestions on how cognitive metaphor scholars should proceed once they have identified what they consider to be the conceptual metaphors present in their material, should they want to show that these metaphors have any exploratory value. Simply identifying those metaphors in a text (or image) not being sufficient is very much in line with what was observed during the analysis of *The Life and Times of Scrooge McDuck*, as there is no clear path for the metaphor to go from the page into the brain. Based on McGlone, the minimum that would have to be done is to see how the same concepts are represented in another culture, and should it then be found that there is a difference in how these concepts are talked of between different cultures, it would still be necessary to establish that this difference extends to how people actually think about them in non-verbal reasoning experiments. At the very least the metaphor ANGER IS THE HEAT OF A FLUID IN A CONTAINER seems to enjoy some type of universality, as observed by Levy (1973), which would suggest its similarity to anger rather than any conceptual nature, so ruing the loss of such elegance in section 5.2. above may have been a tad premature, as that elegance would simply be transferred to its descriptive rather than explanatory power.

It would appear that most studies on conceptual metaphors are content with just identifying the metaphors in the text (McGlone 2007, 114), with not much in the way of establishing their cognitive nature or considering alternative explanations for the data. Some potential examples for these alternative views presented in the present thesis include conceptual broadening and structural similarity, though no claims are made of their ability to provide any all-encompassing explanation to metaphorical language. It is only suggested that considering other explanations and possibly offering arguments against them might be the first step in countering the claims of unfalsifiability.

5.3.3. Conventional vs. Novel Metaphors

An interesting detail that rose up in the results was the difference between conventional and novel metaphors. In section 4.1.1. above, it was noted that a screw that appeared under an angry character might perhaps require conceptual mappings to be understood as it is not a typical way to express anger pictorially (for present purposes the screw is interpreted as a truly novel metaphor, instead of a visual translation of a conventional expression related to loose screws). But what is striking is that the difference between conventional and novel metaphors does not seem to be a well-covered topic within the

literature of CMT, and while this may not be surprising, it is still problematic. It is not surprising because almost all expressions, no matter how conventional, can be interpreted metaphorically within CMT, and there are no such things as "dead" metaphors, which naturally means that there is not much need for a distinction between conventional and novel metaphors. Why this is problematic is that it seems clear that this is not how language works.

Looking at the pitfalls of using conceptual metaphors to explain conventional language makes some of the criticisms of CMT come to a head. Consider for instance a rather appropriate albeit archaic expression involving waterfowls: "the goose hangs high." The phrase might be interpreted as "things are going well" which would be commensurate with the conceptual metaphor HAPPY IS UP, or "things are going badly" based on FAILURE IS DEATH, but without proper context it would be difficult to say which of these the actual meaning of the expression is. Keysar and Bly (1995) found just that when they presented the phrase with the opposite meanings to different test subjects, who were then unlikely to accept the alternative once they had understood it a certain way (as it happens, the negative definition is the more accurate one). In a case like this, these conceptual metaphors would seem to be attempts to make sense of the idiom post-hoc rather than explain it. Another example would be someone saying something along the lines of "that goose is a spittin' image of a duck." As McGlone notes, without sufficient etymological knowledge there might be some attempt to connect spit with the physical quality of resemblance, but the phrase "spittin' image" is actually a contraction of "the spirit and the image" (2007, 116). Incidentally, the expression "come to a head" used at the start of this paragraph does in fact have its origin in bodily experience: an abscess about to burst, though it is unlikely any such knowledge would be required to understand it.

These examples highlight two concerns when doing linguistic analysis involving conceptual metaphors. First, it is at times impossible to intuitively determine what, if any, conceptual metaphor is behind certain expressions just by studying the expressions themselves, and as people as a rule are not etymologists it seems unreasonable to expect them to be aware, even unconsciously, of the origins of the metaphors they use; surely English speakers do not have a collective linguistic memory that reaches back to Anglo-Saxon times and beyond for them to grasp the concrete origins of even the most conventional of expressions (Pinker 2007, 239). Second, the

fact that there appear to be some metaphors that can be understood directly without any conceptual mapping (or such mapping is misleading) casts doubt on there being a need to utilise conceptual reasoning to understand any metaphor.

5.3.4. Theoretical Considerations

The most troublesome aspect of conceptual metaphors when it comes to their potential explanatory value is that CMT as a theory can be rather nebulous. This is most evident in the fact that it does not seem to be entirely clear what it exactly means for a concept to be metaphorically represented, and it is somewhat telling that even the weak and strong views on metaphorical representation had to be identified by someone (Murphy 1996) who does not subscribe to the theory. The mantra that abstract concepts are understood though concrete ones certainly sounds straightforward enough, but things are not always that simple, as was observed in the discussion on emotion concepts in section 5.2. above. But perhaps emotions are a unique case, and they occupy a no man's land between the abstract and the concrete, making ANGER, FEAR and PRIDE concepts that are physically experiential, yet too complex to be grasped directly, resulting in a barrage of explanatory metaphors. This might feel like a possible solution, but the problem seems to persist when thinking of other conceptual metaphors.

Consider one of the most famous examples: ARGUMENT IS WAR. It is certainly true that there are numerous examples of arguments being spoken of in terms of war, but does that make the concept of WAR more concrete than the concept of ARGUMENT? It seems that finding a number of expressions where one thing is being spoken of in terms of another is considered sufficient evidence to name the two terms of a conceptual metaphor, which makes for a system that is vague to the point of being entirely arbitrary. Some of this vagueness may be unavoidable, as most of the studies related to CMT are linguistic, and linguists are necessarily at a disadvantage compared to for instance cognitive scientists when it comes to making any detailed claims about the human conceptual system.

A related issue raised by the results of the analysis is that concepts can include other concepts (PRIDE within ANGER) or conceptual metaphors (TENSION IS ELECTRICITY within ANGER). Concepts being complex is not all that extraordinary, but it is not clear how CMT accounts for this. If we take a supposedly concrete concept of WAR through

which we are to understand the concept of ARGUMENT, it seems obvious that the concept of WAR includes the concept of ANGER, as noted by Murphy (1996, 181), and given how wantonly men have maimed their brothers throughout history, surely it includes FEAR and PRIDE as well. Thus, if ARGUMENT, or any other concept, is truly understood through WAR, it would be necessary to reason about people and their emotions and everything else that the concept includes just to be able to reach a metaphorical understanding of the target (Ibid.). This by itself of course does not mean that these concepts are not metaphorically understood, but it does point to some serious flaws in the theory behind such metaphorical representation, and the concept of WAR begins to appear rather complex for a concrete source domain. No concept is an island, so it is difficult to see how the neat division to target and source would do justice to the way the human mind works. As Pinker (2007, 251) wrote, "You can't think with a metaphor alone."

5.3.5. Etymological Significance of Metaphors

Based on the preceding discussion, it is difficult to see how conceptual metaphors alone could explain the metaphorical nature of much of our language, but that does not mean the theory behind them does not offer any insight into how we think. One aspect of these conceptual metaphors that cannot be denied is their generative power: how easily novel metaphors are both coined and understood is truly remarkable. How would the relationship of a tiny screw to an emotional outburst be instantly understood if we did not make some connection between minds and machines? Indeed, the generative power that certain conceptual metaphors have cannot be swept under a rug, and it suggests interesting possibilities in how metaphors impact language. Many of the arguments against the explanatory value of CMT has been based on there being little evidence that conventional expressions would require any type of conceptual mapping to be understood, but it is important to note that even the most conventional of expressions were novel at some point in time. Whether we actually think of abstract concepts in terms of concrete ones or simply recognise similarities between them, metaphors would still appear to be a tool through which we can devise new ways to express ourselves, and they can perhaps even offer clues to how incredibly complex languages originally developed from a rather limited pool of meaningless sounds.

Metaphors may very well be important to how language and perhaps even the mind works, but it still has to be concluded that Pinker (2007, 247) is most likely right in his

assertion that Lakoff (and Johnson) “takes the idea a wee bit too far.” Given that cognitive metaphor scholars naturally place the emphasis on the mind over language, the potential etymological significance of metaphor might seem a meagre consolation, but so far that appears to be the most that linguistic evidence can support. Therefore, as fascinating as metaphors can be, we should not be too quick to make the servant a master, and Lakoff in particular runs the risk of becoming the Freud of cognitive linguistics: ingenious and hugely influential, but ultimately incorrect. Should that prove to be the case, it would be one of life’s funny little coincidences that there is a simple phrase perfectly suited for such an eventuality: sometimes a cigar is just a cigar.

6. Conclusion

This study set out to evaluate the explanatory value of conceptual metaphors though pictorial representations of emotions. One of the conclusion reached, however, turned out to be that a visual medium does not offer notable benefits over verbal discourse in analysing metaphorical representation, at least based on the material used, as there is no guarantee that the conceptual metaphors are not simply used post-hoc to make sense of the data. Overall, because of it not being entirely clear what it even means for concepts to be metaphorically represented and CMT seemingly being unable to always predict when a concept is abstract or concrete, it is concluded that when it comes to how language is actually used, conceptual metaphors are more likely to be descriptive rather than explanatory. It would seem that CMT as a theory would require metaphors to be interpreted as something static, but based on how language is actually used and understood, several factors appear to contribute to there being variation in how the process of metaphorical understanding takes place, with how conventional the metaphor is being the most significant. But that is not to say that metaphors cannot offer clues to how the human mind works, as metaphors do appear to have a major etymological role; it being impossible to separate language and thought entirely, metaphors surely have cognitive as well as linguistic significance.

How this study was carried out of course had its fair share of limitations, some of which may have had bearing on the conclusions that were reached. A single work by a single artist served as research material, and as talented as Don Rosa is, based on such limited material one cannot be too bullish in making generalisations. This was particularly evident in the case of pictorial runes, the scarcity of which preventing any drastic conclusions. When it comes to CMT itself, it has to be acknowledged that certain aspects of the theory did not receive the attention they would have perhaps deserved. For instance, the present thesis contains only very brief references to the potential significance of culture to CMT, though there have been some interesting work done on the subject (Emanatian 1995, Gibbs 1997). The most significant limitation, however, is that as a provisional linguist I am woefully ill-equipped to comment on the deeper workings of the human conceptual system, which is a rather glaring impediment in evaluating the possible value of conceptual metaphors.

The last of these limitations does suggest the way forward in cognitive metaphor studies, and it is something that has already been touched upon in the course of the

thesis: linguistic studies simply do not seem to be enough to establish what exactly is the connection between metaphors and the conceptual system, or even if any such connection exists, and some form of interdisciplinary approach focusing on experimental and non-verbal reasoning studies is needed to support CMT. There have already been a number of studies on this front, with some intriguing and conflicting results. For instance, Meier and Robinson (2004) found that people recognise positive words quicker if they are presented at the top of a computer screen, while negative words were noted quicker at the bottom, which is very much in line with the conceptual metaphor GOOD IS UP. On the other hand, David Kemmerer (2005) found that individuals with brain damage could have their ability to understand spatial meanings of a preposition impaired while retaining their ability to understand its temporal meanings, while other patients displayed the opposite pattern, which casts doubt on the veracity of such a common conceptual metaphor as TIME IS SPACE. Regardless of where this avenue of research leads, it seem clear that the future of CMT will be decided through experimental studies such as these, and not by adding to an ever-growing pile of linguistic case studies, something that the present thesis is admittedly guilty of doing.

As this thesis has been mainly concerned with CMT and its explanatory value, it is only appropriate to end it with a brief note on Lakoff and Johnson. The pair has undoubtedly done significant work in their bid to understand metaphors both in the language and the mind, and their endeavours have inspired numerous fascinating studies; the field of cognitive linguistics would surely be poorer without their contribution. But it also has to be recognised that given some of the shortcomings of the theory, many of the conclusion they have reached about the human mind seem excessively radical. Of course there is always the possibility that time may yet prove Lakoff and Johnson right on even some of their most ambitious claims, but so far the evidence has not done so.

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Appendix: Signs of Emotions in *The Life and Times of Scrooge McDuck* by Chapter

Key:

CHAP: Chapter ANG: Number of angry characters FEAR: Number of frightened characters

PRI: Number of proud characters VB: V-Shaped Brow CE: Closed Eyes WM: Wide Mouth

TM: Tight Mouth RF/E: Red Face/Eyes HA: Hand/Arm Position EX: Ex-Mouth BF: Bold Font

JL: Jagged Lines DR: Droplets SP: Spikes SM: Smoke SH: Shaking RB: Raised Brows HAIR: Raised Hair

HAT: Hat HEAD: Raised Head CHEST: Raised Chest

CHAP	ANG	VB	CE	WM	TM	RF/E	HA	EX	BF	JL	DR	SP	SM	SH
1	20	17	2	14	4	-	12	-	4	3	-	5	-	-
2	43	38	4	23	8	-	22	3	-	14	2	14	-	1
3	19	16	1	8	9	-	8	7	1	7	-	5	-	-
4	39	31	3	16	19	-	18	3	4	7	4	5	-	-
5	34	32	-	18	11	-	24	2	2	12	1	15	-	-
6	45	33	-	12	13	1	18	2	6	10	2	6	-	2
7	6	5	-	4	2	-	2	-	2	3	1	2	-	-
8	55	46	2	17	14	-	18	2	3	16	3	13	-	-
9	29	25	3	9	8	3	15	1	3	11	-	2	-	2
10	44	37	4	21	7	1	23	6	4	19	10	11	-	1
11	90	86	2	24	24	5	41	5	10	31	11	13	3	3
12	48	43	4	19	9	5	26	1	6	20	13	8	3	4
TOTALS:	472	409	25	185	128	16	227	32	45	150	47	99	6	13

Table 1: Signs of anger by chapter.

CHAP	FEAR	RB	CE	WM	TM	HA	EX	BF	JL	DR	SP	HAIR	HAT	SH
1	8	8	-	5	-	4	3	2	4	5	-	2	-	-
2	16	15	-	10	-	4	2	4	9	11	2	3	5	-
3	24	21	1	9	2	4	6	3	11	19	2	2	4	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	15	14	-	6	3	5	1	2	9	10	3	3	2	-
6	19	17	1	8	2	4	-	6	10	14	1	2	3	-
7	13	12	-	6	7	4	-	-	11	10	1	3	3	-
8	8	7	-	3	-	6	-	3	7	2	-	3	3	1
9	8	7	-	2	3	4	-	-	2	3	1	-	1	-
10	20	15	2	5	5	8	-	3	11	13	1	2	1	1
11	35	35	-	15	6	14	2	4	14	25	-	5	6	2
12	9	9	-	2	2	5	-	1	7	7	1	2	2	1
TOTALS:	175	160	4	71	30	62	14	28	95	119	12	25	30	5

Table 2: Signs of fear by chapter

CHAP	PRI	VB	CE	WM	TM	HA	BF	JL	SP	HEAD	CHEST
1	11	3	3	4	-	9	1	-	7	3	1
2	3	-	1	1	-	2	-	-	3	1	1
3	6	2	2	2	3	6	-	-	4	2	1
4	5	2	-	3	1	4	-	-	5	1	1
5	20	3	7	10	2	12	2	3	9	2	1
6	3	2	-	2	-	1	1	-	2	2	-
7	5	1	-	2	-	5	-	-	3	3	1
8	6	4	1	-	-	5	-	-	2	2	3
9	17	4	9	5	4	13	-	-	8	3	4
10	6	2	1	-	-	4	-	-	5	-	2
11	8	3	3	-	1	7	1	-	2	-	3
12	3	-	-	2	1	1	-	2	2	-	-
TOTALS:	93	26	27	31	12	69	5	5	52	19	18

Table 3: Signs of pride by chapter